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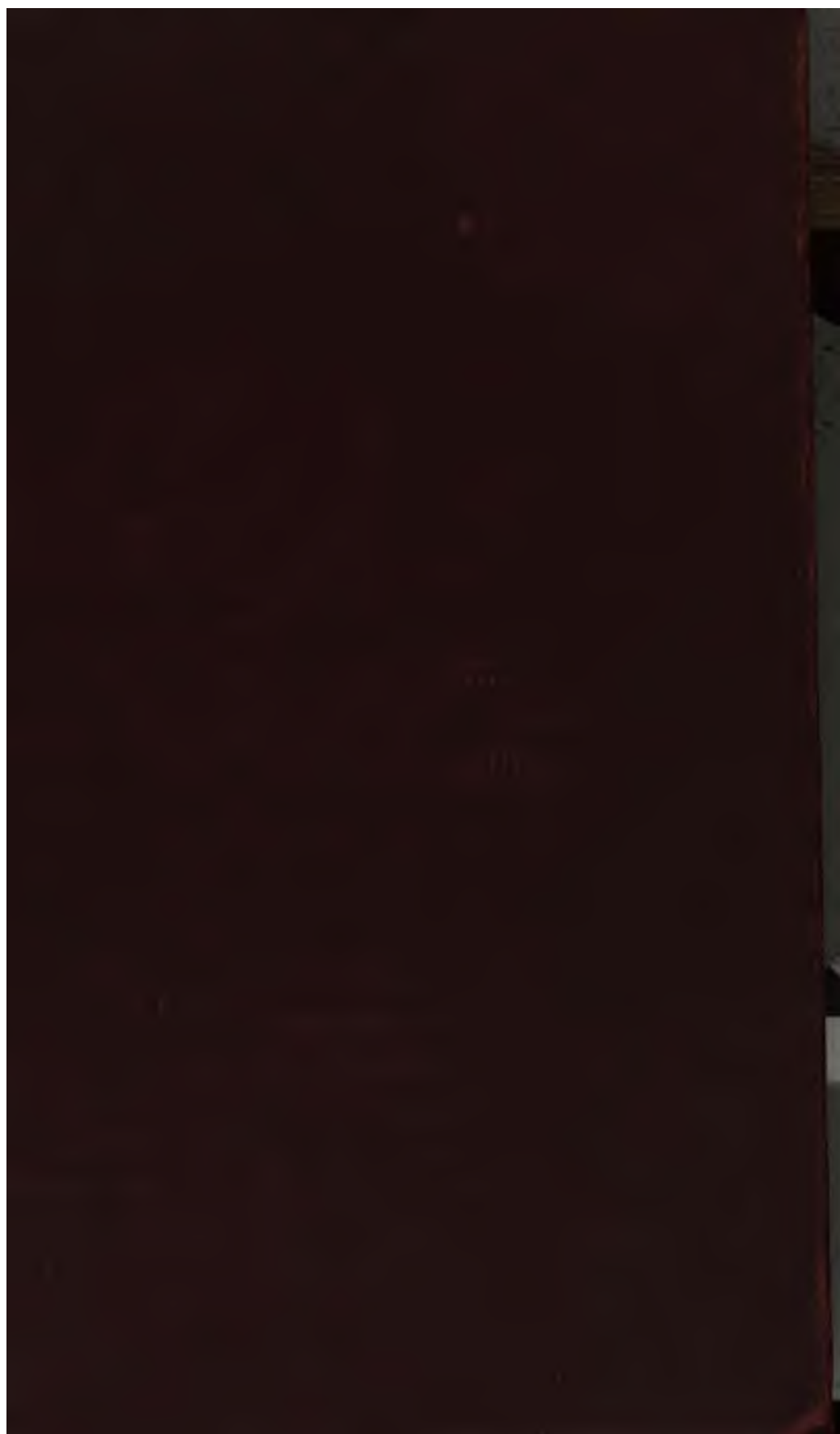
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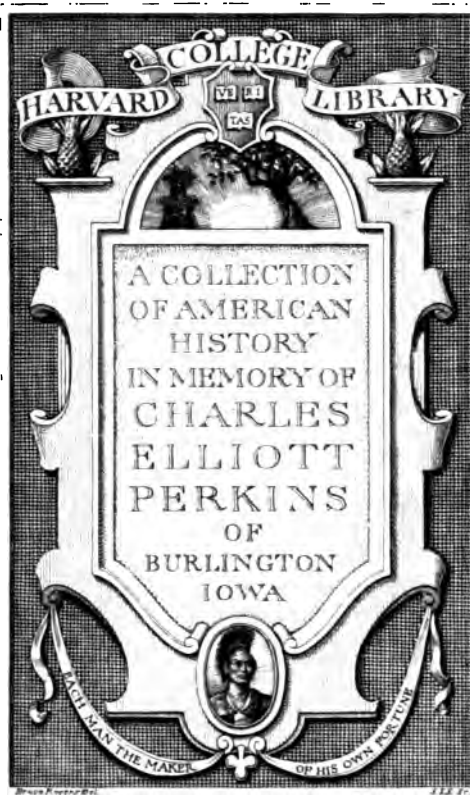
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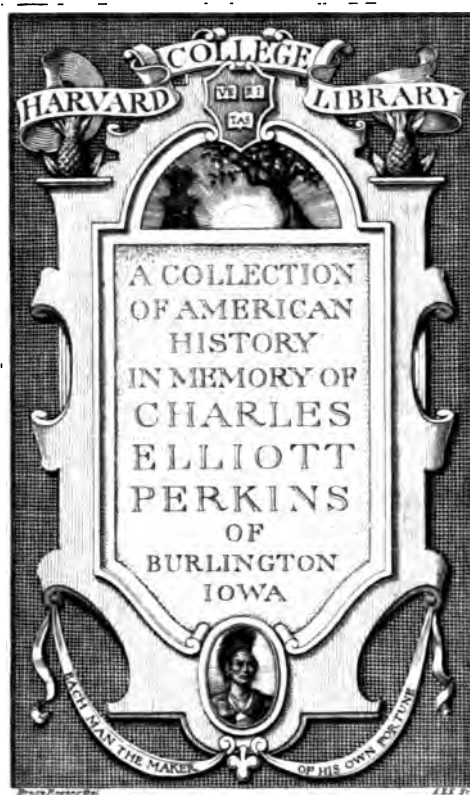


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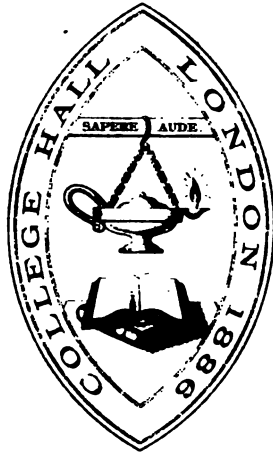


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JOURNAL
OF A
TOUR IN UNSETTLED PARTS
OF
NORTH AMERICA
IN 1796 & 1797.

BY THE LATE
FRANCIS BAILY, F.R.S.,
PRESIDENT OF THE ROYAL ASTRONOMICAL SOCIETY.

With a Memoir of the Author.

LONDON:
BAILY BROTHERS, ROYAL EXCHANGE BUILDINGS.

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PREFACE.

I TAKE on myself the responsibility of recommending the publication of this Journal, which completes a remarkable biography. So far as our own country is concerned, it is printed for those who remember its author, and for those who take interest in the early life of men of science. That others may be amused or instructed by it as a book of travels is an additional reason for its appearance; and, as regards the United States, a sufficient reason.

On looking at a posthumous work of the present kind the question naturally arises, What would the author have said to its publication? On this point there is full right to infer that he left nothing behind him on which the possibility of publication had not presented itself to his mind. He had been an ardent controversialist, and had lived through many scientific disputes, in correspondence with those who were as warmly engaged as himself. Nevertheless, among the thousands of his letters which I have examined, I remember *but one* which so much as alludes to a charge of even scientific misconduct against a scientific man—and that one contains the writer's verdict of acquittal. He must, therefore, systematically have destroyed papers which he wished not to meet other eyes. Farther, it appears that he had materials for a much larger work; and these, it must be presumed, he de-

stroyed, as they do not appear among the carefully preserved records of his early life. Under such circumstances *exclusio unius est admissio alterius*; especially as he was, of all men I ever knew, the most likely to have made a prohibitory memorandum on any manuscript which he desired to remain unprinted.

FRANCIS BAILY passed through life in three very distinct successive characters. At the age of twenty-two, after serving an apprenticeship in London, he was employed as in the following pages; which, had they been published when written, would have made him a name among enterprising travellers, and might have changed his career, by enabling him to realise his project of attempting discovery in Africa. Foiled in this plan, he went into business as a stockbroker; and, while acquiring a handsome independence, he placed himself in the first rank of writers on annuities and assurances. Retiring from commercial pursuits and commercial arithmetic at the age of fifty, he betook himself entirely to astronomy, which he had previously studied, and gained a reputation of which the reader will form his judgment from the account given by Sir John Herschel, and here reprinted.

The narrative now presented to the public is roughly expressed, and will in some points need the excuse of having been written by a young man not twenty-five years of age. I have not attempted any correction, beyond that of a few very obvious omissions of words and grammatical errors. I have not even thought it desirable to make some alteration in the numerous cases in which the *verba de presenti* of the original notes are intermixed with the words of the writer who is narrating the past. Some moral and political reflections have been abbreviated, and some omitted altogether: this has never been done to avoid offence, but only in cases in which the matter suppressed would have been wholly uninteresting.

I have allowed various statements and explanations to remain, which may remind the reader that the work is of the last century, and not of the present one: so that national peculiarities and technical terms which are now well known, are treated as requiring elucidation. Thus it will be learnt, as due information, that the citizen of the United States *guesses*, and that to *come to* is a nautical expression.

I doubt if any—but certainly very few—of Mr. Baily's friends were aware of the extent and character of his travels. He was more than commonly reserved in matters relating to himself; and no old soldier was ever more chary of referring to anything which would insinuate dangers faced or hardships endured. In the course of fourteen years of intimate acquaintance I never arrived at so much knowledge of his adventures as is contained in the few sentences (pp. 4, 5) which formed the sum total of Sir John Herschel's recollections. Occasionally, when some thriving city was mentioned, he would say, "When I passed that spot it was all forest," or the like; but I never heard him drop a hint that he had calculated, under those trees, the chances of being scalped or starved. From all I knew of the writer, I feel sure that the hardship and risk are both understated.

Travels zested with personal narrative are now of comparatively infrequent appearance; not so much from the absence of autobiography, as from the individuality of the writer being overlaid by heavy science and by Greek and Latin sesquipedalians. The lion and the rattlesnake, alive in the vernacular, are fearful objects; but your *Felis Leo* is of the museum, and not of the forest; and your *Crotalus Horridus* reduces dread and terror to mere means of classification. Some may yet be left to like a book—not to say so, Heaven forbid!—which is free from geology, zoology, and all manner of technology. There may even be some

who are tired of the cultivation of style which goes near to reduce all but great masters of writing to monotony, and who will feel it a relief to read, once in a way, some of that English which was current, upon writing-paper only, in the day when an educated man, not an author by profession, would have avowed, as a matter of course, that he could not *write a book*, with as much sincerity as he would have avowed that he could not play the violin. If now and then the young journalist cease to *narrate*, and begin to *write*, it is no more than Robinson Crusoe himself may sometimes be caught at: and boys skip it.

The travels consist of a voyage to and account of Antigua, some slight account of New York, &c., a voyage in an open boat from Pittsburg to New Orleans, down the Ohio and Mississippi, a return by land through the forest to Natchez, from thence to Nashville, and from thence to Knoxville.

Had the publication been intended for the English reader only, I might perhaps have made the tour begin at p. 124; but the part which describes the more civilized districts will have some interest for our brethren in the United States, to whose *archives* the whole work belongs. I should not have attempted, had I been competent, any notes illustrative of the great changes which have taken place on the ground over which Mr. Baily travelled: there are books enough on America as it now is; or, rather, as it was a few years ago. If an editor should steam down the Mississippi with the manuscript, he would need to steam up again with the proof sheets. I have not interfered with the manner in which some names of places are spelt. Mr. Baily went over his manuscript at some later period, and marked with a cross various English words which he found he had used in either new or obsolete senses. I presume he thought he had reason to abide by his local orthographies. Nor do I fear having misinterpreted him:

he always wrote very clearly, and among a hundred little points of attention to accuracy, he wrote his proper names more deliberately than his other words.

The geographical works cited are the *Topographical Description of the Western Territory of North America*, by Captain Gilbert Imlay, of which London editions were published (in octavo) in 1792 and 1795: the *American Gazetteer*, by Dr. Jedediah Morse, of which an octavo edition was published at London in 1789: and Dr. J. R. Forster's translation of the *Travels into North America* of Peter Kalm of Abo, London, 1772, 2 vols. 8vo. The modern maps of America give a very erroneous idea of the bareness of the country travelled over: but there is one which is fully illustrative on this point, attached (1804) to the English translation (and for aught I know to the original) of Volney's work on the climate and soil of the United States.

I suppose we may take it for granted, in our day, that we need no more insist upon every book having a moral, than upon every herring having a mission. But if any be left who ask, *Cui bono?* and know what they are asking, they may be easily answered. A boy, or—as he would have us say—a young man, who feels that nothing but a stirring life will suit his aspirations,—who places heaven in the Crimea, and hell in a counting-house,—is very apt to suppose that the prohibition with which well-judging friends have barred his way must condemn him to shelve all his high energies, and to cultivate only the tamest and most household qualities. To such a one I think the story here told, read with the subsequent life of the author, may be for good—certainly will be, if he possess a small portion of the sound sense which shines in the character of the model placed before him. Mr. Baily, after a course of adventure which would have been a fitting apprenticeship, had set his heart, first upon a military

life, and then upon following the example, and risking the fate, of Mungo Park. Failing in these schemes, he became a stock-broker. But the energy of his character was not thrown away : it enabled him, while making his fortune, to place himself in the first rank of cultivators of one branch of science ; and, after he had made his fortune, to obtain like success in another. The same resolution which, with the ardour of twenty-five, would have led him over African deserts for the promotion of one knowledge, sustained him, for the sake of another, through four years—to name only one labour of research—which involved more than twelve hundred hours of watching the oscillations of a pendulum. If any one had told Mr. Baily, at the time when the love of excitement and of scenery induced him to pass—not reckoning landings—about fifty days and nights in an open boat on the Ohio and the Mississippi, that the time would come when he would sit for as many hours as put together would make up all those days and nights, with his eye at a little telescope, watching and recording the slow travelling of an index over some wires,—he would have treated the assertion with laughter, and would have held that his tastes and views would never fall in with such a monotonous drudgery. But it did so happen, nevertheless ; and, what is more, the stimulus was of much the same kind in both cases, and also the force of character which faced the undertaking: half those hours were passed under the prospect of failure, and the mortification of seeing all go wrong from causes which there seemed no hope of detecting. The Cavendish experiment will not be the task of his age to every young man who has been disappointed of a life of adventure ; but then the Cavendish experiment is not the only path of utility in which energy may find the wholesome wear and tear for which it longs. The young possessor of this great moving power is apt to imagine that he has a vocation for one

or another line of active life,—for arms, for the sea, for travel, as may happen,—not because he has any such vocation, but because he has the desire of full and stirring occupation, which naturally turns his mind to the pursuits in which it is most obvious to his yet limited sight that his desire can be satisfied. In like manner, when he was younger, it will often have happened, as he must remember, that there was something indispensable in the window of the most come-at-able toyshop, the absolute necessity of which might be traced to his having a little money burning a hole in his pocket. It may be as hard to teach him now, that inspiring difficulties are found in every worthy walk of life, as it was to teach him then, that if he would but wait till to-morrow he would find something two streets off which he would like much better than anything at the shop round the corner. But it is worth the trying. If the comparison of the youth of Francis Baily with his mature age should persuade some young aspirants to fame, that every element of human power may conduce to utility, to distinction, and to happiness, in any field of human action,—this book will have moral enough. What the writer of it did for others and for his own reputation, the story of his life may tell. What his pursuits did for his own real good, must be referred to the memory of those who enjoyed his friendship: among whom there is assuredly not one who will venture to say positively that he ever knew a better or a happier man.

A. DE MORGAN.

UNIVERSITY COLLEGE,
London, February 6, 1856.

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JOURNAL OF A TOUR, &c.

MEMOIR OF FRANCIS BAILY,

BY

SIR JOHN HERSCHEL, BART.

* * *This Memoir was drawn up at the request of the Council of the Royal Astronomical Society, and was read at a Special General Meeting of the Society, held November 8th, 1844.*

IN the performance of the melancholy duty imposed on me by the wishes of the Council, that I should endeavour on this occasion, to place before the assembled Members of the Society a sketch of the scientific life and character of our late lamented President, I have been careful both to examine my own competency to the task, and to consider well the proper limits within which to confine myself in its execution. In the first of these respects, indeed, though tolerably familiar with some of the leading subjects which I shall have to touch upon, there are others on which I have seriously felt the want of a longer interval for preparation. On these, of course, I shall take care to express myself with becoming diffidence ; and in so vast a field of laborious inquiry and of minute yet important research as I shall have to range over, it may easily be supposed I have more than once found occasion to wish that the duty had fallen into abler hands. A duty, however, it is, and a very sacred one, which we owe to departed merit, to society, and to our-

selves, to fix as speedily as possible, while its impress is yet fresh and vivid, its features in our minds with all attainable distinctness and precision, and to store them up beyond the reach of change and the treachery of passing years.

As respects the limits within which I feel it necessary to confine myself on this occasion, it is to astronomers to whom I have to speak of an astronomer,—to members of a large and, in the simplicity of truth I may add, a highly efficient public body—of an officer to whom more than to any other individual, living or dead, it owes the respect of Europe. To make what I have to say complete as a biography, however interesting to us all, however desirable in itself, is very far either from my intention or my power. Nor is the time fitting for the attempt. The event is too recent, the particulars which can be collected at the present moment too scanty, the grief of surviving relations too fresh, to admit of that sort of close and pertinacious inquiry into facts, anecdotes, documents, and evidence, which personal biography requires to be satisfactory. In this respect, therefore, a mere sketch is all that I can pretend to give.

FRANCIS BAILY was born on the 28th of April, 1774, at Newbury, in the county of Berks. His father was Mr. Richard Baily, a native of Thatcham, in the same county, who became established as a banker at Newbury. He married Miss Sarah Head, by whom he had five sons and two daughters. Francis, who was the third son, received his education at the school of the Rev. Mr. Best, of Newbury, an establishment of considerable local reputation, where, although probably little of an abstract or mathematical nature was imparted, the chief elements of

a liberal and classical education were undoubtedly communicated. From his early youth, he manifested a propensity to physical inquiry, being fond of chemical and especially of electrical experiments,—a propensity sufficiently marked (in conjunction with his generally studious habits) to procure from him, among his young contemporaries, the half-jesting, half-serious *sobriquet* of “the Philosopher of Newbury.”

It does not appear that he received any further instruction beyond the usual routine of an establishment of the kind above mentioned ; so that, in respect of the sciences, and especially of that in which he attained such eminent distinction, he must be regarded as self-educated. This taste for and knowledge of electricity and chemistry were probably acquired from Dr. Priestley, with whom, at the age of seventeen, he became intimately acquainted, and of whom he always continued a warm admirer. But that his acquaintance with the subject was considerable, and his attachment to it permanent, may be concluded from the fact, that Mr. Welsh, the organist of the parish church of Newbury, who had a very pretty electrical apparatus, and at whose house I remember myself to have first witnessed an electrical experiment, is stated to have imbibed his taste for that science, and to have acquired its principles, from Mr. Baily’s example and instructions at a somewhat subsequent period.

He quitted Mr. Best’s school at fourteen years of age ; and, having chosen a mercantile life, which accorded with the views of his parents, he was sent to London, and placed in a house of business in the City, where he remained till his twenty-second year, when, having duly

served his time, and either not feeling an inclination to the particular line of business in which he had commenced his life, or being desirous of the general enlargement of mind which travel gives, or from mere youthful love of adventure and enterprise, he embarked for America on the 21st of October, 1795, which, however, he was not destined to reach without twice incurring the most imminent danger from shipwreck, both on our own coast, under most awful circumstances, on the Goodwin Sands, and off New York, which he was prevented from reaching, being driven to sea in a gale. After endeavouring in vain to reach Bermuda, he was driven into Antigua, whence he subsequently embarked for Norfolk, in Virginia.

In America he remained one or two years, travelling over the whole of the United States and through much of the western country ; in which travel he experienced, at various times, much hardship and privation, having, as I remember to have heard him state in conversation, (and which must have referred to this period of his life,) passed eleven months without the shelter of a civilized roof. During his residence in America, he was not unmindful of his intellectual and social improvement, having not only read* much and observed much, as a

* Perhaps the first printed publication of Mr. Bailly is a letter to Mr. Noah Webster, jun., signed F. B., and inserted in McLean's "New York Gazette," for December 11th, 1797. It is a criticism on Mr. Webster's English, containing objections, partly just, partly unfounded. Mr. Webster replied in the same journal for December 12th, repudiating the ordinary grammars, and referring to his own ; he added, that for a *foreigner* to throw odium on his efforts to serve the essential interests of his country, was something worse than dishonourable.—Ed.

copious journal which he transmitted home proves, but formed the acquaintance of some eminent persons, among whom may be mentioned Mr. Ellicot, the Surveyor-General of the United States, from whom he obtained some curious information bearing on the periodical displays of meteors on the 12th November, of which that gentleman observed a superb instance in 1799, and from whom it is not impossible he may have acquired a taste for observations of a more distinctly astronomical and geographical nature.

Whatever may have been the more direct object of this journey, if indeed it had any other than to gratify a youthful inclination for travel and adventure, it does not appear to have exercised any material influence on his after-life, since, on his return to England, in place of immediately entering into business, he continued to reside for some time with his parents at Newbury, which, however, at length he quitted for London, to engage in business as a stock-broker, being taken into partnership by Mr. Whitmore of the Stock Exchange. The exact date of this partnership I have not been able to learn. I believe* it to have been 1801 ; but that it must have been prior to 1802, may be concluded from the subject of his first publication, which appeared in that year ; viz., "Tables for the Purchasing and Renewing of Leases for Terms of Years certain and for Lives, with Rules for Determining the Value of the Reversions of Estates after any such Leases." This work (as well as the next) is preceded by a highly practical and useful Introduction, and followed by an Appendix, which shows that at the

* It was about the end of 1799.—Ed.

age of twenty-eight he had become well versed in the works of the English mathematicians, and had also consulted those of foreign ones. It speedily attained a standard reputation on account of its intrinsic utility, and went through several editions. His next work, a pamphlet in defence of the rights of the Stock-Brokers against the attacks of the City of London, printed in 1806, at all events shows him at that time to have become identified in his feelings and interests with that body, of which he lived to be an eminent and successful member. A similar conclusion may be drawn from his next publication, which appeared in 1808,—“The Doctrine of Interest and Annuities Analytically Investigated and Explained,” a work than which no one more complete had been previously published, and which is still regarded as the most extensive and standard work on compound interest. It was speedily followed by other works on the same subject; viz., in 1810, by “The Doctrine of Life Annuities and Insurances Analytically Investigated and Explained;” to which, in 1813, he added an Appendix. This is a work in many ways remarkable, and its peculiarities are of a highly characteristic nature; method, symmetry, and lucid order, being brought in aid of practical utility in a subject which had never before been so treated, and old routine being boldly questioned and confronted with enlarged experience. A friend of great mathematical attainments and extensive practical acquaintance with subjects of this nature, thus characterises it:—“It is not easy to say too much of the value of this work in promoting sound practical knowledge of the subject. It was the first work in which the whole of the subject was

systematically algebraized ; the first in which modern symmetry of notation was introduced ; and the first modern work, since Price and Morgan, in which the ‘Northampton Tables’ were not exclusively employed, and in which the longer duration of human life was contended for ; and the first in which some attempt was made to represent by symbols the various cases of annuities and assurances, afterwards more systematically done by Mr. Milne.” In the Appendix to this work, a method originally proposed by Mr. Barrett of forming the tables, by which cases of temporary and deferred annuities, formerly requiring tedious calculations, become as easy as the others, and which, in the improved form subsequently given to it by Mr. Griffith Davies, has come into very general use in this country, was, by the penetration of Mr. Baily, given to the public, but for which it would probably have been altogether lost. It may serve to give some idea of the estimation in which this work was held, that, when out of print,* its copies used to sell for four or five times their original price. A chapter of this work is devoted to the practical working of the several life-assurance companies in London, containing some free remarks on several points of their practice. Mr. Babbage has subsequently followed in the same line (as he has also advocated extending the estimation of the

* It was translated into French by M. Alfred De Courcy, and published at Paris in 1836, in two volumes octavo. A spurious edition of the original, with an attempt to deceive by imitation of type, was handed about for sale among the assurance offices in 1850, and may now be found on the bookstalls. The means of distinguishing the spurious from the genuine edition may be found in “Notes and Queries,” vol. iv., No. 89.—ED.

duration of life to still more advanced ages). However unpleasing it may be to public bodies, especially commercial ones, to see practices of whose injustice they may perhaps have been unaware, convicted of it, and made matter of public animadversion, there can be no doubt that criticisms of this kind, when really well grounded and expressed with temperance and moderation, are both salutary to the parties concerned, and merit, in a high degree, the gratitude of the public. A higher praise is due to the candour and boldness of openly entering the lists on such occasions, and despising the anonymous shield of which so many avail themselves.

But while devoting his attention thus assiduously to matters of direct commercial interest, he could yet find time for other objects of a more general nature. Astronomical pursuits had already begun to assume in his eyes that attraction which was destined ultimately to draw him aside entirely from business, and to constitute at once the main occupation and the chief delight of his life. As everything to which he turned his thoughts presented itself to them, if I may use the expression, in the form of a palpable reality, a thing to be turned and examined on all sides,—to be reduced to number, weight, and measure,—to be contemplated with steadiness and distinctness, till everything shadowy and uncertain had disappeared from it, and it had moulded itself, under his scrutiny, into entire self-consistency, the practical branches of astronomical calculation early became, in his hands, instruments of the readiest and most familiar application, as the touchstones of the truth of its theories, and the means of giving to them that substantial reality which his mind seemed to crave as a condition for their

distinct conception by it. His first astronomical paper, on the celebrated solar eclipse, said to have been predicted by Thales, which was written in November, 1810, and read before the Royal Society on the 14th March, 1811, affords a remarkable instance of this. That eclipse had long been a disputed point among chronologists. It was easy to perceive, and accordingly all had perceived, that an eclipse of the sun, so nearly central as to produce great darkness, being a rare phenomenon in any part of the globe, and excessively so in any precisely fixed locality, must afford a perfectly certain means of determining the date of a coincident event, if only the geographical locality be well ascertained, and some moderate limits of time within which the event must have happened be assigned, and provided the means were afforded of calculating back the moon's place for any remote epoch. In this case, both the locality and the probable historical limits were sufficiently precise ; and the account of Herodotus, which agrees only with the character of a total and not of an annular eclipse, (as Mr. Baily was the first to remark,) still further limits the problem. But the tables of the moon employed by all prior computists were inadequate* to carry back her place with the requisite exactness, nor was it till the publication of Burg's "Lunar Tables" that the means of doing so were in the hands of astronomers. The course of Mr. Baily's reading at this period (being then, no doubt, employed in collecting the materials for the Chronological Tables in his "Epitome of Universal His-

* Recent improvements in the "Lunar Tables" have shown that this question must be re-opened.—Ed.

tory," which appeared not long after) brought him necessarily into contact with this subject. He perceived at once both the uncertainty of all former calculations of this eclipse, and the possibility of attacking it with a fresh prospect of success. None, however, but a consummate astronomical calculator would have ventured on such an inquiry, which involved the computation of all the solar eclipses during a period of seventy years, six centuries before the Christian era. These calculations led him to assign, as the eclipse in question, that of September 30th, B.C. 610, which was central and total, according to these tables, at the very point where all historical probability places the scene of action.

Most men would have regarded such a result, obtained by so much labour, with triumphant complacency : not so Mr. Baily. His habit of examining things on all sides, instead of permitting him to rest content with his conclusion, led him on to further inquiry, and induced him to calculate the phenomena of another total eclipse recorded in ancient history, that of Agathocles, which happened August 15th, B.C. 310, an eclipse of which neither the date nor the locality admits of any considerable uncertainty, and which, therefore, appeared to him well fitted to test the accuracy of the tables themselves. Executing the calculation, he found indeed a total eclipse on the year and day in question, and passing near to the spot, *but not over it*. An irreconcilable gap of about 3°, or 180 geographical miles, remains between the most northerly limit of the total shadow, and the most southerly supposable place of Agathocles's fleet. Although this may justly be looked upon as a wonderful approximation between theory and historical fact, (indicating, as

it does, a correction of only 3' in the moon's latitude, for an epoch anterior by more than 21 centuries to that of the tables,) yet it did not escape Mr. Baily's notice, nor did his love of truth permit him to conceal the fact, that no presumed single correction of the tabular elements will precisely reconcile *both* eclipses with their strict historical statement. There seems, however, no reason to doubt that the eclipse of 610 B.C. is, in fact, the true eclipse of Thales. It seems extraordinary that neither Professor Oltmanns, who investigated the eclipse of Thales about two years subsequently, and who came to the same conclusion, nor M. Saint Martin, who read an elaborate memoir on the same subject to the French Institute in 1821, should have made any mention of this very remarkable paper of Mr. Baily.

The "Epitome of Universal History," of which mention has already been made, was published in 1813, and intended to accompany an "Historical Chart" published the year before, an extension and improvement of Dr. Priestley's, in which the political alterations of territory are represented through the whole of history. It is an easy and useful work of reference, in which the number and accuracy of the dates, and the utility of the appended tables, are especially valuable. There can be little doubt that the object of this work was much less to produce a book than to systematise and concinnate the author's own knowledge. When such a task is undertaken by a mind at once vigorous in its grasp, and simple, practical, and natural, in its points of view, it can hardly fail to result in a picture of the subject where all the parts are truly placed, and easily apprehended by the general reader. The Chart with its explanation, forming a dis-

tinct work, was in considerable request, and went through three editions in five years.

About the 22nd of January, 1814, occurred the celebrated fraud of De Beranger, that being the assumed name of an impostor employed to bring important but false intelligence from the scene of war abroad, for the purpose of influencing the price of the British funds. The imposture was so adroitly managed, that many bargains were made on the strength of this intelligence, and much confusion caused. In the detection and exposure of this fraud, Mr. Baily had a considerable share, and was appointed by the committee of the Stock Exchange to get up the evidence against the perpetrators,—a task which he is said to have performed in so masterly a manner, that no more complete and conclusive chain of evidence was ever produced in a court. The result of these inquiries, and the steps taken in consequence, were made the subject of three Reports of the above-mentioned committee, drawn up by him, and printed in that and the subsequent year.

From this time, astronomy appears to have been continually engaging more and more of his attention. The subject of eclipses and occultations with their connected calculations, together with that of the improvement of the “Nautical Almanac,” which, whatever might be said on specific points, had certainly at that time begun to fall considerably behind the requisitions of astronomical, and even of nautical science, were those with which he may be said to have commenced his more active astronomical career. But I wish to call attention at present to two pamphlets which he published in 1818 and 1819, respectively, which will afford occasion for some remarks

of moment. The first of these is a notice of the annular eclipse of September 7, 1820, whose path lay along the whole medial line of Europe from north to south. Two points in this tract merit our attention. In it he adopts a practice, which he subsequently on a great many occasions adhered to, of introducing in the way of prefatory statement, a brief but very clear sketch of the history of the subject, and the observations of former astronomers. These little historical essays are, for the most part, extremely well drawn up, and highly interesting, and show a perfect knowledge of the subjects treated of, drawn from very extensive reading. The next point, and one of more importance, is the studious consideration shown to observers possessed of slender instrumental means, in pointing out to them modes and forms of observation by which those means might be rendered available and useful. At no period of his life himself possessing any large and elaborate instrument or luxurious appliances, one of his constant aims was to render astronomical observation popular and attractive, by showing that much of a highly useful character might be accomplished with even moderate instruments. There is no question more frequently asked by the young astronomer who has possessed himself of one or two tolerably good instruments which he desires to employ his time upon, than this, "How can I make myself useful?" Nor any which can be more readily answered by a reference to the innumerable notices on almost every point of practical astronomy which Mr. Baily from this time forward for many years continued to scatter profusely to the public, and which have probably done more to create observers and to cherish and foster a taste for practical astronomy

among Englishmen, than any single cause which can be mentioned.

In 1819 he printed for private distribution a translation of Cagnoli's memoir on a "Method of Deducing the Earth's Ellipticity from Observations of very Oblique Occultations," with an appendix recommendatory of the method, which is precisely such as requires for its perfect execution only a sufficient telescope, a moderately good clock, and an observer diligent in watching opportunities. This was, no doubt, Mr. Baily's chief reason for translating and distributing it, and for subsequently following it up by his chart and catalogue of the Pleiades, through which the moon had to pass at each lunation in 1822 and the following years, thereby affording admirable opportunities for applying the principle in question. I should not, however, have thought it necessary, in the midst of so many claims on our notice, to draw especial attention to this work, but for one passage in it deeply interesting to all of us. I mean that in which he alludes to the formation of an Astronomical Society, as an event earnestly to be desired.

"It is much to be regretted," he observes, "that in this country there is no association of scientific persons formed for the encouragement and improvement of astronomy. In almost all the arts and sciences, institutions have been formed for the purpose of promoting and diffusing a general knowledge of those particular subjects the beneficial effects of which are too evident to be insisted on in this place. But astronomy, the most interesting and sublime of the sciences cannot claim the fostering aid of any society The formation of an Astronomical Society would not only afford

this advantage, but would in other respects be attended with the most beneficial consequences," &c. &c.

It is thus that coming events cast their shadows before them. But looking back from this point, as it were, to the then embryo state of our corporate existence, it would be ungrateful not to associate with the name of Francis Baily that of Dr. Pearson, as having at or about the same time made the same suggestion. It was happily and speedily responded to, and on Wednesday, the 12th of January, 1820, a preliminary meeting of the fourteen founders of our Institution took place, which resulted in its final establishment, and in which, during the first three years of its existence, Mr. Baily filled the office of secretary; in other words, undertook and executed the more laborious and essential duties. The establishment of this society may, indeed, be considered as a chief and deciding epoch in his life, and to have furnished, though not the motive, yet, at least, the occasion, for the greater part of his subsequent astronomical labours. Looking to it, as every one must do, as a most powerful instrument for the advancement of the science itself, and the propagation of a knowledge of and a taste for it among his countrymen, he yet appeared to regard it as something more than simply as a means to an end. He made it an object of personal attachment and solicitude, which led him to watch over its infant progress with parental care, and to spare no exertion in its behalf. As years passed on, and as the institution flourished, (as every institution must do which is constituted on sound principles, whose members are loyal to those principles, and willing to work heartily in its cause), this sentiment, so far from diminishing, seemed

to grow upon him till he regarded its welfare and interests as identical with his own. I shall reserve a more distinct statement of our obligations to him for a more advanced period of this notice : but, in a narrative of his life, it becomes impossible from this epoch to separate the *Astronomical Society* from astronomical *science*, in our estimate of his views and motives, or to avoid noticing the large and increasing devotion to its concerns of his time and thoughts. To the Transactions of the new Society he became, as might be expected, a frequent and copious contributor. In the interval between the first establishment of the Society and the year 1825 (the reason for this limit will presently be seen) he contributed five papers, viz. : "On the Meridian Adjustment of the Transit Instrument ;" "On the Determination of Time by Altitudes near the Prime Vertical ;" "On the Solar Eclipse of September 7th, 1820 ;" "On the Mercurial Compensation Pendulum ;" and "On the Determination of Longitudes by Moon-culminating Stars." The two first mentioned of these turn on somewhat elementary points of astronomical observation, and contain tables, and suggest facilities, which he had found useful in his own practice. The eclipse was observed by him at Kentish Town, where not being annular, he must have felt severely the sacrifice, imposed probably by the calls of business, of the opportunity of witnessing by a short continental trip, a phenomenon which had engaged so much of his thoughts. His paper on the Mercurial Pendulum, though practical in its object, was of a much more elaborate kind than any thing which had previously emanated from him, with exception of his memoir on the eclipse of Thales. It contains a minute and

excellent view of the whole subject of this most useful compensation ; is prefaced (*more suo*) with a clear synoptic view of the then actual state of the subject, and goes into the whole subject of the expansion of the materials, the formulæ for determining with more precision than heretofore the proportional length of the mercurial column, and the mode of adjustment both for rate and compensation. This paper must certainly be regarded as a very valuable one, and an astronomer can hardly be said thoroughly to understand his clock who does not possess it. The object of the paper on moon-culminating stars is to recommend, facilitate, and render general, that most useful and widely available method of determining the longitude on land.

About this period, also, Mr. Baily began, and thenceforward continued, to be a frequent contributor to the "Philosophical Magazine," published by Messrs. Tilloch and Taylor, of articles interesting in a great variety of ways to the practical astronomer. These articles are so numerous, and so miscellaneous in their subject-matter, that it would be vain to attempt any detailed account of them, within such limits as I must confine myself to. Nor, indeed, is it requisite to do so ; as many of them, however useful at the time, have now ceased to present any especial interest, apart from their general object, which was that of diffusing among the British public a knowledge of the continental improvements in the art of observing, and the practice of astronomical calculation, and placing in the hands of our observers and computers a multitude of useful tables and methods, which, though sure to work their way ultimately into use, were un-

doubtedly accelerated in their introduction into English practice by coming so recommended. More special objects were those of recommending to general attention and use certain eminently practical methods, such as those of determining latitudes by the pole-star, and longitudes by moon culminations and occultations, copious lists of which were, on several occasions, either procured from abroad and reprinted here, or calculated by himself for the purpose.

The circulation of notices, also, of other remarkable expected phenomena, with a view to procuring them to be observed,—the description of newly invented foreign instruments, or of such as had been long known, but little used in England,—the analysis of foreign astronomical publications,—every thing, in short, which could tend to excite curiosity, to cherish emulation, and to render the British astronomical mind more excursive and more awake than heretofore, found a place in these contributions; of which so constant and copious a fire was kept up, as may well excite our surprise at the industry which sustained, no less than our admiration of the zeal which prompted it.

A volume of astronomical tables and formulæ, printed in 1827 for private distribution (as was frequently his custom,) and then largely circulated, but since published with corrections, is of the utmost convenience and value, and will be highly prized by every astronomer who may be fortunate enough to possess a copy, as a work of ready and continual reference for all the data and coefficients of our science. A series of zodiacal charts was also commenced by him, but I am not able to say if more than one plate was engraved.

One of the most practically important and useful

objects, however, to which Mr. Baily's attention was about this period turned, was the facilitating, by tables properly contrived for the purpose, the reductions of apparent to mean places of the fixed stars. It seems almost astonishing that these computations, which lie at the root of all astronomy, and without which no result can be arrived at, and no practical observer can advance a single step, should have remained up to so late a period as the twentieth year of the nineteenth century, in the loose, irregular, and troublesome state which was actually the case, and *that* not from their theory being ill understood, but from their practice not having been systematised. Each of the uranographical corrections had to be separately computed by its own peculiar tables, and with coefficients on whose magnitude no two astronomers agreed. The latter evil, indeed, might be tolerated at a time when the tenth of a second of space was not considered of so much consequence as at present, but the calculations were formidable and onerous in the extreme to private astronomers, whatever they might be rendered in public establishments by habit and the use of auxiliary tables. So far as the fundamental stars were concerned, the subject had for some time attracted attention, and had begun to receive its proper remedy by the publication, by Professor Schumacher in Denmark, of their apparent places for every tenth day ; and by the laudable exertions of Sir James South in our own country, who, for some years, prepared and circulated similar tables for every day, not without urgent representations of the necessity of taking it up as a public concern, which was at length done. But for stars out of this list, except about 500 somewhat facilitated by Zach, there was no provi-

sion of any kind, nor any auxiliary tables to have recourse to; so that sidereal astronomy, beyond the bounds of this favoured list, might be almost said to be interdicted to the private astronomer, owing to the excessive irksomeness of these calculations. This was precisely the sort of case for Mr. Baily to take pity on. He perceived a desert where, with a moderate expenditure of capital, a plentiful harvest might be made to grow, and forthwith proceeded to remedy the evil. Accordingly, with the aid of Mr. Gompertz, he investigated the subject generally, and succeeded in devising a method of arranging the terms of the corrections for aberration, and solar and lunar precession, adapted to the purpose, and identical in principle with that adopted by M. Bessel, who, on his part, was at the same time, and actuated by the same motives, engaged on the subject unknown to Mr. Baily. The latter had actually proceeded to the computation of his tables, when the labours of Bessel reached his knowledge, who had, moreover, included the precession under the same general mode of expression. Mr. Baily, with characteristic frankness and candour, immediately acknowledged this as an improvement in advance of his own idea, and at once adopted and recommended it for general use. He did more: he carried out the idea into a wide and most useful field; and in the Catalogue of the Astronomical Society he has put the astronomical world in possession of a power which may be said, without exaggeration, to have changed the face of sidereal astronomy, and must claim for him the gratitude of every observer. It detracts nothing from the merit of Mr. Baily, or from his claim to be considered the author of this precious work, that the numerical computations were chiefly exe-

cuted by Mr. Stratford, and the expenses borne by the Astronomical Society. The conception was all his own, and the work prefaced, explained, and superintended, in every stage of its progress, by himself alone. The gold medal of this Society was awarded to him for this useful work.

On the 22nd February, 1821, Mr. Baily was elected a Fellow of the Royal Society. He was also a Member of the Linnean and Geological Societies ; but I am unable to state the precise date of his election in either.

In 1825 he retired from the Stock Exchange, after a career in which his consummate habits of business, his uprightness, intelligence, and prudence, had established his fortune, and might, if continued, have led him on to any eminence of worldly wealth. But there was that in his disposition which the mere acquisition of wealth could not satisfy. All that he had before done for his favourite science seemed only preparatory to what he might do ; and with the best years of his intellectual life before him, and with objects worthy of his efforts now opening to his view in that direction, he resolved henceforward to devote himself to their pursuit, though at the sacrifice of prospects whose attractions always prove irresistible to minds of a lower order. In thus calmly measuring the relative worth of intellectual and worldly pursuits, and stopping short in the full career of success, when arrived at a point which his undazzled judgment assured him to be the right one, he afforded an example of self-command as uncommon as it was noble. In the satisfaction which the decision afforded him, and the complete fulfilment of those aspirations which led him to form it, we have one proof (if proofs be wanting) how entirely a well-chosen

and elevated scientific pursuit is capable of filling that void in the evening of life, which often proves so intolerably irksome to men who have retired early from business from mere love of ease or indolence. On no occasion did he ever appear to regret the sacrifice he had made, or even to regard it as a sacrifice.

No desire of listless ease or self-indulgence, however, could by possibility have mixed with Mr. Baily's motives in taking this step ; for immediately on doing so he entered on a course of devoted and laborious exertion, which continued without interruption during the remainder of his life, and of which the history of science affords few examples. The mass of work which he got through, when looked at as such, is, in fact, appalling, and such that there seems difficulty in conceiving how it could be crowded into the time ; the key to which is, however, to be found in his admirably conceived methodical arrangement of every piece of work which he undertook, and his invaluable habit of finishing one thing before he undertook another.

At this epoch, or very shortly subsequent to it, he purchased and took up his permanent residence in his house in Tavistock Place, excellently adapted in every respect both to his future comfort and convenience as a place of abode, and for those important and delicate researches of which it was destined to become the scene ; standing, as it does, insulated in a considerable garden, well enclosed on all sides, and, from the nature of the neighbourhood, free from any material tremor from passing carriages. A small observatory was constructed in the upper part, for occasional use and determination of time, though he never engaged in any extensive series of

observation. The building in which the earth was weighed and its bulk and figure calculated, the standard measure of the British nation perpetuated, and the pendulum experiments rescued from their chief source of inaccuracy, can never cease to be an object of interest to astronomers of future generations.

In endeavouring, according to the best of my ability, to give some account of the astronomical labours of Mr. Baily subsequent to this period, it will no longer be advisable to adhere, as I have hitherto done, to the chronological order in which they were undertaken and executed. It will rather be preferable (with exception of a few memoirs and publications of a miscellaneous nature) to consider them under distinct heads, according as they refer to one or other of the following subjects, viz. :—

1. The Remodelling of the “Nautical Almanac ;”
2. The Determination of the Length of the Second’s-Pendulum ;
3. The Fixation of the Standard of Length ;
4. The Determination of the Density of the Earth ;
5. The Revision of the Catalogues of the Stars ;
6. The Reduction of Lacaille’s and Lalande’s Catalogues ; and,
7. The Formation of a New Standard Catalogue.

The “Nautical Almanac.”—The end of the eighteenth and the commencement of the nineteenth century are remarkable for the small amount of scientific movement going on in this country, especially in its more exact departments. It is not that individuals were not here and there busied in extending the bounds of science even in these, but they met with little sympathy. Their excursions were limited by the general restriction of view which had begun to prevail, and by a sense of loneliness

and desertion (if I may use such an expression) arising from that want of sympathy. Mathematics were at the last gasp, and astronomy nearly so ; I mean, in those members of its frame which depend upon precise measurement and systematic calculation. The chilling torpor of routine had begun to spread itself largely over all those branches of science which wanted the excitement of experimental research. I know that I have been blamed on a former occasion for expressing this opinion ; but it is not the less true, though we may now happily congratulate ourselves that this inanimate period has been succeeded by one of unexampled activity. To break the dangerous repose of such a state, and to enforce that exertion which is necessary to healthy life, there is always need of some degree of friendly violence, which, if administered without rudeness, and in a kindly spirit, leads at length the revived patient to bless the disturbing hand, however the urgency of its application might for a moment irritate. It is in this light that we are to regard the earnest and somewhat warm remonstrances of Mr. Baily on the deficiencies which had long begun to be perceived and felt in the "Nautical Almanac," in its capacity of an astronomical ephemeris.

The subject once moved gave rise to a great deal of discussion, from more than one quarter, which was from time to time renewed for some years ; but as I have no intention to make this notice an occasion of dilating on any matter of a controversial nature, I shall merely add that, on the dissolution of the late Board of Longitude, followed almost immediately by the death of Dr. Young, on whom the charge of its superintendence rested, (the new Berlin Ephemeris, by Encke, having also recently

appeared, in which many of the principal improvements contended for were adopted,) it seemed fitting to the Lords Commissioners of the Admiralty to place unreservedly before the Astronomical Society the subject of a complete revision and remodelling of that great national work—a high proof of confidence, which speaks volumes for the good sense, prudence, and activity which had continued to pervade its administration during the ten years which had now elapsed since its first institution.

It is hardly necessary to add that this important business received the most unremitting attention from Mr. Baily, as well as from every other member of the Committee in all its stages. To him also was confided the task of drawing up the final report of the Committee appointed to carry out the wishes of the Admiralty, which will be found in the fourth volume of our “Memoirs,” and which is a model of good sense, clearness, and lucid arrangement. The Report was immediately acted upon by Government, and the result was the present British “Nautical Almanac ;” a work which, if it continue to be carried on, as I trust it ever will, on the principles which prevailed in its reconstruction, will remain a perpetual monument to the honour of every party concerned in it.

The “Pendulum.”—The second’s-pendulum having been constituted the legal source from which, in the event of the loss of the national standard of length, the yard might at any time be recovered, it may be easily imagined with what intensity of interest the announcement was received among all conversant with these fundamental determinations, that a very material correction had been entirely overlooked in the reduction of the

experiments, on which the Act of 5 Geo. IV. c. 74, was founded. This correction is, in fact, no other than the correction due to *the resistance of the air*, and, placed in this light, it would seem somewhat wonderful that such an oversight could have been committed ; but it had been customary to consider the effect of resistance on the time of vibration to be wholly confined to its influence in diminishing the arc ; and this secondary effect being allowed for in the formulæ employed to compute what is called the correction for the arc of vibration, the primary or direct effect of resistance dropped altogether out of notice, or rather (owing to an entire misconception of the nature of the mechanical process by which resistance is operated) had been supposed to be altogether inappreciable in its amount. The real effect of resistance, though under a somewhat confused statement as to its nature, had, however, been long before noticed, and its amount even ascertained with tolerable correctness, by the Chevalier Buat, in 1786 ; but his experiments and theory had so entirely fallen into oblivion as to have escaped the notice not only of Captain Kater, but of his own countrymen, Borda and Biot, and were unknown even to Bessel himself, who, in 1828, rediscovered the correction in question, and, for the first time, made it an integrant feature in the modern system of pendulum reductions. The light in which this correction was placed by Buat, and even in some respects by Bessel, tended not a little, in my opinion, to obscure the clear perception of its nature, by representing it as due to a certain portion of air adhering to and bodily *dragged along* by the pendulum in its motion, thus adding to its inertia without adding to its relative weight when corrected for

buoyancy; and in this view, also, Mr. Baily regarded it. That this is not a complete and adequate view of the subject, is easily made a matter of ocular inspection, by causing a pendulum to vibrate, or any body to move, near the flame of a candle, when it will be at once evident that the movement of the air consists in the continual transfer of a portion of air from the front to the rear of the body, by performing a circuit half round it. Its hydrodynamical investigation, therefore, is of an infinitely higher order of difficulty than the ordinary problems of resistance, which turn upon a theory of molecular impulse, simple indeed, but very far from satisfactory. It properly refers itself to the theory of sound, and has, in fact, been so investigated in an admirable memoir by Poisson.*

But to return from this digression, (which, however, will not have been without its use, if it shall tend to diffuse clear conceptions of the subject, and to disentangle from one another corrections which seem to have got unduly mixed up together in the minds of practical inquirers.) No sooner were the ideas of M. Bessel promulgated in England, than Captain Sabine, whose attention was pointedly directed to a subject which had occupied so large and active a portion of this life, resolved

* If this view of the subject be correct, as I am persuaded it is, it seems not impossible that, by making a section of the pendulum coincident in form with the "wave-formed outline" of Mr. Russel's ships, the resistance correction might be annihilated altogether, or so nearly as to render it quite inappreciable.

I trust that, in what is said above, I shall not be supposed to undervalue M. Bessel's analytical treatment of this intricate problem, especially as it conducts to results which, regarded as a first approximation, represent sufficiently well the results of experience.

to ascertain the true amount of this new, or newly-mentioned, correction, in the only way in which it could be effectually done, viz., by vibrating the pendulum *in vacuo*, which he accordingly effected by a series of highly interesting experiments, carried on at the Royal Observatory at Greenwich, and recorded in the "Philosophical Transactions," in a paper read March 12, 1829. His result makes the total reduction to a vacuum about one and two-thirds of that usually called "the correction for buoyancy." It should, however, be borne carefully in mind, that the particular correction now in question has, in fact, nothing whatever to do with the buoyancy correction, either in its mode of production or its form of expression, and ought, therefore, to be very studiously kept apart from it in all theoretical views, though, of course, they must be numerically amalgamated in the "reduction to a vacuum."

Meanwhile the attention of Mr. Baily had, about the same time, been called to the pendulum, in consequence of the contemplated expedition about to sail under the command of Captain Foster, on that memorable and most unfortunate expedition which cost him his life. It was on this occasion, and with a view to the use of this expedition, that Mr. Baily (still acting for the Astronomical Society, whose aid had been requested in suggesting useful objects of inquiry) devised that capital improvement in the system of itinerant pendulum observation, which consists in making each transferable pendulum a convertible one, by the simple addition of another knife-edge, and in doing away with extra apparatus of tail-pieces, sliders, &c., by the initial adjustments of the instrument. And I may here incidentally remark, that

the general principles of reducing, as far as possible, the number of moveable parts in every instrument intended for standard determinations of whatever kind, is one which cannot be too strongly recommended, and has been successfully acted on by the present Astronomer Royal [Mr. Airy] in more than one recent construction. Two pendula, a copper and an iron one, on Mr. Baily's principle, were furnished by the Society for this expedition, an account of which may be found in the "Notices" of the Society for June 13, 1828.

The adjustment and trial of these pendula previous to the sailing of the expedition, were performed by Mr. Baily at his own house, and, thus engaged in actual experiment, he at once became led on into a minute examination of all the possible sources of practical error in the experiments, and consequent uncertainty in the important results of which they had become the basis. It was in this stage of his experience that he became acquainted with Professor Bessel's results, which determined him (as they had already done Captain Sabine) to go into the whole subject of the new correction by experiments performed *in vacuo*. But not content with assuming any fixed proportionality between it and the buoyancy correction, he resolved so to vary the form, magnitude, and materials of the vibrating masses, as to make its true nature and amount an object of inductive experimental inquiry; thus, though adopting the language of Buat and Bessel, disengaging himself in effect from any theoretical view of the *modus operandi* or mechanical process by which the effect was produced.

The result of these inquiries was a very elaborate and masterly paper read to the Royal Society on the 31st of

May, 1832, containing the results of experiments in air and in vacuo, on upwards of eighty pendulums of various forms and materials, by which the new correction is clearly shown to depend not only on the dimensions, but on the form and situation of the vibrating body. Independent of the excellence of this paper as a specimen of delicate experimental inquiry and induction, in which, to use the expression of one best capable of appreciating and admiring them, his generalizing powers seem to have been held in abeyance till the right moment for their exercise arrived, it had the further merit of bringing into distinct notice a number of minute circumstances, (important, however, from their influence on results,) chiefly relative to the mode of suspension, which it is absolutely necessary to attend to in these delicate and difficult inquiries, if the pendulum be ever again resorted to as a means of verifying or fixing anew the standard of length.

The return of the Chanticleer in 1831, without its lamented commander, threw the whole task of arranging and digesting for publication Captain Foster's pendulum observations on Mr. Baily—a labour of love, prompted by the warmest friendship, and which he executed in the spirit of one determined to erect a monument to the fame of that truly amiable and talented officer, of the most durable and precious materials. His report on the subject to the Admiralty was presented by the Lords Commissioners to the Council of the Astronomical Society, and printed at the expense of Government as the seventh volume of our "Memoirs." In this report the observations are given in full, and with the most scrupulous fidelity, and those at each of the numerous stations discussed with the utmost care. The final re-examination

of the pendulums in London, was also personally executed by Mr. Baily, and the whole series of stations combined into a general result, which gives for the ellipticity of the earth $\frac{1}{289.48}$. Not content with this, he has here also collected into one synoptic view the results obtained at various stations all over the globe with the invariable pendulum, by observers of all nations, so as to place them in comparison with each other, and to deduce from them a general result. Of these, by far the most numerous and prominent, in every respect, are those of our own countrymen, Captains Foster and Sabine; and nothing can be more gratifying, in estimating our own national share in this sublime application of science, than to find these principal authorities, whose observations were made and reduced with the most absolute independence of each other, agreeing at all the stations where they admit of comparison, with a precision truly admirable. In fact, the greatest disagreement of each of their final results, from a mean of them both, amounts to a quantity less than half a vibration out of 86400, or in a mean solar day.*

“Standard of Length.”—From the pendulum to the standard of length, or the fixation of the *scientific unit*, the transition is easy, and in Mr. Baily’s case was unavoidable. For, being once satisfied by experience of the innumerable minute circumstances on which perfect precision in these inquiries depends, and finding the

* The stations of comparison are London, Maranham, Ascension, and Trinidad. Taking London for a term of departure, each station affords a ratio whose extremes (see “Report,” p. 86) differ only by 0.0000103, the half of which multiplied by 86400 gives 0.44446.

parliamentary enunciation of the relation between the conventional and natural standards nullified, as it were, under his eye, he felt himself irresistibly urged to inquire how far the conventional unit itself might be depended upon, and within what limits of error it might certainly be reproduced in copies. His first step in this direction was to obtain the most perfect possible representative of this unit, and (as the Astronomical Society was now identified with almost all his undertakings) justly considering the possession of such a standard by that body as a thing in itself desirable, and the instrument itself likely, if thoroughly well executed, to become in its hands of universal scientific reference, he procured himself to be named by the Council a Committee for superintending its execution, and comparing it with the most authentic standards at present existing in this country. Perhaps there is no subject of inquiry more perplexing, or one whose investigation calls for more patience and perseverance, than the detection and exact estimation of those minute sources of error which influence these delicate measurements, which can only be satisfactorily performed by endless repetition and systematic variation of every circumstance by which error can possibly be introduced. Another and peculiar source of annoyance, and even vexation, consisted in the rough and careless usage to which those precious instruments, on which the conservation of our national units depends, had been subjected in too many instances, by which rude and ignorant hands had irrecoverably marred some of those refined productions of human workmanship, which ought not even to be approached but with precaution, or touched but with the utmost delicacy. Few things seem to have

excited Mr. Baily's indignation more than the continual occurrence of evidence, only too palpable, of the small respect in which these standards appear to have been held by those under whose protection they had been placed, and of the violence which has been repeatedly suffered to be perpetrated on them.

I shall by no means go into any minute analysis of the admirable "Report" to the Council of this Society, which contains his account of the construction of our standard scale, its comparison with the parliamentary standard, and its most authentic existing representatives—and with the French metre, as we have it represented in this country by two platina metres, in the possession of the Royal Society; or the means taken to secure it from loss, by the formation of carefully compared copies, two of which have been sent abroad, and two retained in England. Suffice it to say, that the delicacy of the means employed, the minuteness of the precautions used, and the multiplicity of the comparisons, surpassed every thing of the kind which had ever before been done in this country. This Report, too, is valuable in another way. Under the modest title of "A Short History of the Standard Measures of this Country," it presents a summary of the subject so complete as almost to obviate the necessity of referring elsewhere for *historical* information.*

* Mr. Baily was assisted in the actual comparisons by several Fellows of the Society, among whom the late Lieut. Murphy was conspicuous, an observer whose temper and scientific habits peculiarly fitted him for co-operating with Mr. Baily, and whose name would probably have occurred more than once in this memoir but for his untimely death, which took place in the service of Astro-

The immediate result of this useful and most laborious undertaking has been to put this Society in possession of, perhaps, the most perfect standard measure and divided scale in existence, in which every division, even to the individual inches, has been micrometrically verified, and its errors ascertained and placed on record. It would almost seem, too, as if a prophetic spirit had actuated the undertaking, and urged it to its completion without any of those delays which so often and proverbially attend the construction and optical examination of delicate instruments. For the comparison of the new scale with the imperial standard yard had hardly been completed six months, when the latter, together with the other original standard by Bird (that of 1758), as well as the imperial standard of weight, were destroyed in the conflagration of the Houses of Parliament in October 1834. Thus the operation in question has been the fortunate means of preserving, to the latest posterity, that unit which has pervaded all our science, almost from the first dawn of exact knowledge.

The scientific unit is indeed preserved ; but the nation remained, and remains up to this moment, without a legal standard either of weight or measure. In the early part of 1838, however, in consequence (as I have been led to understand) of some communications on the subject between Mr. Baily, Mr. Bethune, and the Astronomer Royal, the latter was induced to draw the attention of Government to the subject, an occasion having arisen which rendered the mention in an official form unavoidable. And on the 11th of May of the same year a com-

nomy in a distant region, and was probably the unfortunate consequence of over-exertion in its cause.

mission was appointed, consisting of seven* members (Mr. Baily being one), to report on the course most advisable to be pursued under these circumstances. To this duty, which involved the hearing of a vast deal of evidence and much personal attendance, Mr. Baily gave his unceasing attention; suggesting many valuable points, both practical and theoretical; and, on the Report of the Commission being agreed on, and the practical formation of new standards, in conformity with the view therein taken of the subject, being referred by Government to the same commissioners, Mr. Baily undertook, to the general satisfaction of the whole body, and at their particular request, the delicate and important task of reconstructing the standard of length—a task which, unhappily, he did not live to complete. On whomsoever may† devolve the completion of this standard, it will be satisfactory to the Members of this Society to know that, among the evidence adduced for its restoration, the scale prepared for it by Mr. Baily necessarily forms a most important and prominent feature.

“Density of the Earth.”—The accurate determination of one fundamental quantity naturally leads to inquiry into others. To make our globe the basis of measurement for the dimensions of the planetary system and of

* An eighth was subsequently added.

† The task was undertaken by Mr. Sheepshanks, one of Mr. Baily's most devoted friends, who gave it, during eleven years, an amount of thought and labour which will be but poorly collected even from the report of his proceedings now preparing. The number of *recorded* micrometer observations falls but five hundred short of ninety thousand. Mr. Sheepshanks died August 4, 1855, almost on the day on which his results received a legal sanction.—Ed.

the visible universe, its form and magnitude must first be accurately known. To make it afford a scale by which the masses and attractive forces of the sun and planets can be expressed in terms conveying a positive meaning, its density must be ascertained, as compared with that of substances which occur on its surface, with which our experience is familiar, and from which our notions of material existence are drawn. The fine experiment of Cavendish, confirmed as it was, in its general result, by the operations on Schehallien, had satisfactorily demonstrated the continuity of the Newtonian law of gravity, from such vast distances as astronomy is conversant with, through the intermediate steps of the diameters of the earth, and of a mountain, down to those minute intervals which intervene between the parts of a philosophical apparatus, and their agreement within as moderate limits as could have reasonably been expected, —and had even led to something like a probable estimate of the earth's density, which, however, could never be regarded as satisfactory, otherwise than as a first step towards more precise determinations. Mr. Baily's labours, therefore, on the pendulum were hardly brought to a conclusion, when he was led to enter upon this subject, the immediate occasion of his doing so being an incidental suggestion at the council table, by Mr. De Morgan, of the desirableness of repeating the experiment of Cavendish,*—a suggestion immediately seconded

* *Fiat justitia, ruat cælum.* The original design of this beautiful experiment was Michell's, who actually constructed the identical apparatus which Cavendish used, but died before he could execute the experiment. The apparatus came, after his death, into the possession of the Rev. W. H. Wollaston, D.D., who gave

both by the Astronomer Royal and by Mr. Baily. The experience of the latter had shown him how indispensably necessary, in such inquiries, are extensive repetition and variation of circumstance. The Schehallien experiment, from its very nature, admitted of neither; and, on carefully examining Cavendish's record of his own experiment, he found abundant reason to perceive how much was left to be desired, in both these respects, even in that form of the inquiry.

In resolving on a repetition of this experiment, the difficulty of the undertaking itself, and his own preparation for it, must have been, and no doubt were, very seriously considered. However confident in his own resources and perseverance, it was no holiday task in which he was now about to engage. The pendulum experiments, with all their delicacy, could hardly be regarded as more than an elementary initiation into the extreme minuteness necessary for this inquiry. There are two branches of research in physical astronomy which task to the utmost the resources of art, the delicacy of manipulation, and the perseverance of the inquirer,—the parallax of the fixed stars, and the density of the earth. In both, an immense object has to be grasped by the smallest conceivable handle. But, of the two problems, the latter is probably that which throws the greatest burden on the inquirer, inasmuch as it is not merely a

is to Cavendish, who used it, indeed, to excellent purpose, but who assuredly neither devised the experiment, nor invented, nor constructed, nor even, so far as I can perceive, materially improved the apparatus. All this is distinctly stated by Cavendish himself, who is, therefore, noway to blame for any misconception which may prevail on the subject.

series of observations to be carried on under well-ascertained circumstances and known laws, but a course of experiments to be entered on for eliminating or controlling influences which war against success in every part of the process, and where every element, nay, even the elementary powers of heat, electricity, magnetism, the molecular movements of the air, the varying elasticity of fibres, and a host of ill-understood disturbing causes, set themselves in opposing array in their most recondite and unexpected forms of interference. Nor could it have been overlooked by him that it was necessary, not merely to do over again what Cavendish had done before him,—a thing in itself not easy,—but to do it much more thoroughly and effectually.

Mr. Baily, however, was not to be discouraged by such considerations. He saw that there existed a blank in our list of exact data which it was necessary to fill, and he felt himself in possession of those gifts of nature and position which enabled him to fill it. Accordingly, in 1835, on the occasion above alluded to, the Astronomical Society appointed a committee to consider the subject; and Mr. Baily having offered to perform the experiment, in 1837, the Government (at the instance of Mr. Airy) granted the liberal sum of £500 to defray the cost.

This great work was brought to a satisfactory conclusion in 1842, and a complete account, with a full detail of the experiments, printed in one volume, published in 1843, forming the fourteenth of the series of “Memoirs” of this Society. The experiments were varied with balls of different materials, and with suspensions no less various, combined so as to form no less than 62 distinct series, embodying the results of 2,153 experi-

ments; and which, formed into groups according to the nature of the combination, afford 36 distinct results, taking those only in which the balls were used, the extremes of which are 5·847 and 5·507, and the most probable mean 5·660, none of them being so low as Cavendish's mean result, 5·448. The probable error of the whole (0·0032) shows that the mean specific gravity of this our planet is, in all human probability, quite as well determined as that of an ordinary hand-specimen in a mineralogical cabinet,—a marvellous result, which should teach us to despair of nothing which lies within the compass of number, weight, and measure. I ought not to omit mentioning, that, of all the five determinations of this element we possess, Mr. Baily's is the highest.*

Though it would be equally remote from my present purpose, and superfluous in presence of such an assembly, to enter minutely into a discussion of these experiments, there is one point in their conduct which I cannot pass over in silence. The experiments had been carried on for eighteen months, a vast number of preliminary trials had been made, and upwards of one thousand registered results obtained, when it became apparent that the coincidence of Cavendish's results, one with another, was

* The five determinations alluded to are, in order of magnitude, as follows :—

Schehallien experiment from Play-	Max...4·867	} Mean... 4·713
fair's data and calculations ...	Min...4·559	
Carlini, from pendulum on Mont Cenis, corrected by Giulio	4·950	
Reich, Repetition of Cavendish's experiment (most probable combination)	5·438	
Cavendish, Computation corrected by Baily	5·448	
Baily (most probable combination)	5·660	

rather to be attributed to the paucity of his trials than to any especial accuracy in his observations or felicity in his mode of operating. Even in the few experiments made by Cavendish, discordances had shown themselves, of which no account could be given other than by reference to the movements of included air; but, on Mr. Baily's extensive scale of operation, the limits of disagreement obviously arising from this cause became so enormous as to render it hardly possible to draw any line for the reception and rejection of results. In fact, at one period he had almost begun to despair of bringing the matter to any positive conclusion. The happy suggestion of Mr. Forbes, to *gild* the torsion-box and leaden balls, at once dispelled all this vagueness and uncertainty, and reduced the results to a high degree of uniformity.* Most experimenters would have been content to reject the discordant results. Mr. Baily unhesitatingly sacrificed the whole, and began anew, without appearing to regard with an instant's regret the time and labour lost. The gold medal of this Society was awarded to him for this important memoir.

“Revision of Catalogues of the Stars.”—The contributions of Mr. Baily to this branch of sidereal astronomy are so numerous and so important, as alone would suffice to rank him among the greatest benefactors to the science, since, without being himself an observer, he has conferred, by his indefatigable industry and perseverance

* This was not, however, the *only* precaution used. Mr. Baily carried out the suggestion, by swathing the torsion-box in flannel, and applying over this defence an exterior *gilded* case. Should the experiment ever again be repeated, it should be attempted *in vacuo*.

in collating authorities, rescuing original observations from oblivion, and rectifying printed errors, a vast and unhopèd-for accession of value to the works of all those on whom he has commented. In fact, this, which may be termed the archæology of practical astronomy, formed his staple and standing work, which, though from time to time interrupted by other subjects, was always resumed ; always with increasing interest, and always on a larger and more effective scale, up to the very year of his death. His object appears to have been, so far as is now practicable, to destroy the gap which separates us from the elder astronomers, and to multiply, or at least to preserve from further destruction, the links which connect us with them ; to ascertain *all that has really been* recorded of the stars, and to make that totality of knowledge the common property of astronomers—a precious and a pious labour, of which we have no examples, except in that spirit of loyal reverence which prompted Ptolemy to secure from oblivion the observations of Hipparchus, and make them the foundation of all future astronomy ; and in that which animated Bessel, when on the basis of Bradley's observations he may be said to have afforded the means of reconstructing the whole fabric of the science.

The catalogues which Mr. Baily has re-edited are those of Ptolemy, Ulugh Beigh, Tycho Brahé, Halley, Hevelius, Flamsteed, Lacaille, and Mayer ; a mass of commentation, expurgation, and minute inquiry before which the most stout-hearted might quail, since there is not one of them in which each individual star has not been made the subject of a most scrupulous and searching examination, and in which errors that had escaped all prior detection,—errors of reading, errors of entry, of copying, of calcu-

lation, of printing, out of number,—have not been detected and corrected. But for these labours, the catalogues of Ptolemy and Ulugh, indeed, must have remained sealed books to any but professed antiquaries; and although we can now hardly ever have occasion to appeal to these earliest authorities for any practical purpose, we cannot but look on the labour thus cheerfully bestowed in embalming and consecrating their venerable relics as the sure pledge that our own works, if really worthy, will not be suffered to perish by time and neglect.

But while we admire both the diligence and the scrupulous exactness, of which the notes appended to these catalogues bear ample evidence, we must not omit to mention, that there are two of them, those of Mayer and Flamsteed, in respect of which Mr. Baily's researches have been pushed far beyond the mere duties of comparison and comment, having been extended to the conservation and minute examination of the original records from which the catalogues were formed. In the case of Mayer, his influence with the late Board of Longitude secured the publication (in 1826) of the original observations of that eminent astronomer at Gottingen, which had never before seen the light. In the case of Flamsteed, his labours were much more extensive, and require a more particular statement, inasmuch as not only Flamsteed's greatest work, the "British Catalogue," found in him its restorer to that high rank, as an astronomical document, which it is justly entitled to hold, but the fame and character of its author their defender and rescuer from grievous misapprehension and mistatement.

In 1832 it happened, by a most singular coincidence, that Mr. Baily became aware of the existence, in the pos-

session of his opposite neighbour in the same street, E. Giles, Esq., of the whole of Flamsteed's autograph letters to Abraham Sharp, and was permitted to peruse and copy them. Their perusal convinced him that Flamsteed's life, astronomical labours, and personal character, had never been fairly placed before the world, and induced him to examine with care the mass of his papers preserved (or rather neglected and mouldering) at Greenwich. His first care was to arrest the progress of their further decay : his next, to avail himself of the original entries of the observations, and of the manuscript records of the computations founded on them, to trace out the sources, and to rectify the numerous errors and inconsistencies of the "British Catalogue" as it then stood before the world, and to present it to the public under quite a new aspect—as a noble monument of its author's skill and devotion, and a work worthy of the age and country which produced it. Among the papers thus examined, however, were also found an almost complete autobiography of Flamsteed, and a voluminous correspondence illustrative of those points so painfully at issue between Flamsteed, Newton, and Halley, relative to the publication of the Catalogue and observations, and to other matters of a more personal nature, which had hitherto all along been stated in an infinitely more unfavourable light towards Flamsteed than that which appears, from Mr. Baily's thorough and voluminous exposition of the whole affair, and the evidence of the almost innumerable letters which he has printed at length, truly and properly to belong to them. Indeed it seems impossible not to admit, on the evidence here produced, that great and grievous injustice was done, and hardship imposed, in

these transactions, on Flamsteed, whose character stands forward, on the whole showing, as that of a most devoted and painstaking astronomer, working at extreme disadvantage, under most penurious arrangements on the part of government, making every sacrifice, both personal and pecuniary, and embroiled (as I cannot help considering, by the misrepresentations and misconduct of Halley) with the greatest man of his own or any other age, holding a position with respect to the Observatory, as Visitor, which, under mistaken impressions of the true bearings of the case, might cause severity to assume the guise of public duty.

The volume which contains this important work of Mr. Baily was commenced (as we have seen) in 1832, and published in 1835, a rapidity of execution truly astonishing, when we consider that the volume extends to nearly 800 pages quarto ; that the notes to the Catalogue alone occupy no less than 144 of them, closely printed, not a line of which but involves some question of identity, of nomenclature, of arithmetical inquiry, or of reference to other authorities ; that the examination and selection of the letters and other biographical matter for publication was a matter of the utmost delicacy and responsibility ; and that the preface, which contains Mr. Baily's own summary of Flamsteed's life, the introduction to the Catalogue and the Supplement, in further vindication of Flamsteed's character and justification of his own views of it,—are all of them works of a very elaborate nature, and of the highest interest.

“Catalogues of Lacaille and Lalande.”—But Mr. Baily's views were not confined to the mere correction of existing catalogues. The labour of the commentator and

collator, which has filled and satisfied so many minds, was to him only a means to an end of real practical importance. His aim was to render readily available to every astronomer all recorded observations of the sidereal heavens which could be depended on. Two great masses of observation might be said to exist buried under their own weight, and affording matter of grief and reproach to astronomy, now to be exchanged for congratulation and triumph. These were Lacaille's observations at the Cape of nearly 10,000 stars, and those of D'Agelet and Michel Lefrançois Lalande at Paris, of nearly 50,000. Neither of these collections of observations had been more than partially reduced. Lacaille himself had performed this task for 1942 of his stars. A considerable number of the stars of the "*Histoire Céleste*" (Lalande's observations) had also been reduced and catalogued by Bode. But the great mass of both remained unreduced and unarranged, though it is true that Lacaille had accompanied each page of his observations with a table of reductions, and that in 1825, Professor Schumacher had published and dedicated to this Society a volume of assistant tables, enabling any one, with little trouble, to reduce any single observation of the "*Histoire Céleste*." Still they remained unreduced, and, therefore, useless, except on those rare occasions when, for special reasons, it might be necessary to search out and reduce any particular object.

Thus was a treasure of great value held in abeyance. This Mr. Bailly perceived, and after some correspondence with the French Bureau des Longitudes, which, however, led to no result, he resolved to bring the subject before the British Association. That liberal and energetic body

at once acceded to his views, and in 1838 appointed two committees, each with funds at their disposal, to execute the reductions and prepare the catalogues. The reduction and arrangement of Lacaille's stars was executed under the superintendence of Mr. Henderson, that of Lalande's under Mr. Baily, the arrangement of the work in both (if I mistake not) having been effected on a plan concerted and matured by the latter. Both works were reported as complete (the prefaces alone excepted) in 1843, and it only remained to provide for their printing. This also was done by the liberality of the British government, who assigned £1000 for the purpose; and this work was especially placed under Mr. Baily's direction. These catalogues, unhappily, he did not live to see published. The printing, however, of each was found advanced at his decease as far as 8320 stars,* and is now continuing† under the more immediate inspection and superintendence of Mr. Stratford.

“Catalogue of the British Association.”—I have yet to speak of another and a magnificent work undertaken and brought to a successful conclusion by Mr. Baily; a work which, perhaps, deserves to be considered as the greatest boon which could have been conferred on practical astronomy in its present state, and whose influence will be felt in all its ramifications, giving to them a coherence and a unity which it could hardly gain from any other source. I allude to the general standard catalogue of nearly 10,000 stars, which the British Association are

* The total number of stars in the two catalogues respectively, will amount to 9,766, and 47,400.

† See the additions to the list of works at the end of this memoir.—ED.

about to publish, at the instance of Mr. Baily. The plan of this great and useful work is an extension of that of the Astronomical Society, of which I have already spoken. The stars (selected by Mr. Baily) form a universal system of zero-points, comprehending probably every star of the sixth and higher magnitudes in the whole heavens. All the coefficients for their reduction are tabulated, and the greatest pains bestowed upon their exact identification and synonymes in other catalogues; so that this, in all human probability, will become the catalogue of universal reference. It is preceded by a valuable preface from the pen of Mr. Baily, his last contribution to astronomical science.

A very important feature of this and the two catalogues last noticed is their nomenclature. The system adopted is the same in all; and *that*, a system not capriciously adopted or servilely copied, but founded on a most searching and careful revision of all existing catalogues, and of the charts of Bayer, Flamsteed, and Lacaille, rectifying* the boundaries of constellations which had become strangely confused, correcting innumerable errors of naming, numbering, and lettering, and reducing, in short, to order and regularity, a subject which had become almost hopelessly entangled. The way is thus at length opened to a more rational distribution of the heavens into constellations, and that final step which must sooner or later be taken, of introducing a systematic nomenclature into sidereal astronomy, rendered easy, whensoever astronomers shall be prepared on other grounds to take it. The trouble and difficulty attending

* The boundaries of the constellations on Malby's globes were laid down by Mr. Baily, shortly before his last illness.—ED.

this part of the work exceeds what any one unused to such tasks can easily imagine.

There are two papers by Mr. Baily relating to sidereal astronomy, of which mention ought to be made here ; viz., one "On the Proper Motions of the Stars," which was read before the Astronomical Society on the 9th December, 1831, in which a list of about 200 stars, whose proper motion appears sufficiently sensible to merit further inquiry, is discussed. In drawing up this list, he was much aided by a series of transit observations by Dr. Robinson, observed expressly with a view to this inquiry. But as no positive conclusion of a general nature is arrived at in this memoir, and as the subject is yet hardly ripe for a complete discussion, I shall dilate no further on it. The other paper to which I allude (which was read also to this Society on the 14th November, 1834) states the result of an examination of Dr. Halley's MSS. at the Royal Observatory. The appointment of Astronomer Royal was held by Halley twenty-two years ; and though for the first two of them the Observatory was entirely deprived of instruments, and for the next four a five-feet transit only was available, it might, at least, have been expected that he should have used diligently the means he did possess, or, at all events, have recorded the observations he did make in a regular, methodical, and intelligible manner. From Mr. Baily's examination of these papers, however, this appears to have been very far indeed from the case ; and that, with the exception of differences of right ascension between the moon and planets and neighbouring fixed stars, which alone he seems to have considered worthy of attention, little of interest could be expected to repay

the trouble and expense of their reduction. Of these papers, Mr. Baily, ever anxious for the preservation of records, and mindful of the dormant value which they so often possess, obtained from the Admiralty a transcript, which, being carefully collated with and corrected by the original MSS., is now deposited in our library.

The mention of the Royal Observatory induces me to notice here a change which has been lately made in the constitution of that noble institution, by a revision of the royal warrant, defining the number and mode of appointment of the Visitors, and placing this Society on a similar and equal footing with the Royal Society in the discharge of that important duty. This change was made at Mr. Baily's suggestion, with the entire concurrence, however, of the then President of the Royal Society, as to its expediency, on the occasion of the demise of the crown by the death of George IV., which rendered a new warrant necessary. The new system has been found to work admirably well, and to have secured a perfect harmony of feeling between the Visitors and the eminent individual who now fills the post of Astronomer Royal, as well as entire confidence in the recommendations and suggestions of that body on the part of Government. Aware, as all now are, of the fatal and soporific influence of routine in public institutions, they have only henceforward to guard against the opposite extreme ; to which end, they cannot do better than take for their guide and example that admirable combination of energy, gentleness, and judgment, which distinguished Mr. Baily, no less on every public occasion than in his conduct as a Visitor ; in which capacity, under both the old and new system of visitation, he was an

invariable attendant, having never been absent, during a period of twenty-eight years, from any meeting but the last.

About the end of June, 1841, an accident happened to him which had very nearly proved fatal. Crossing Wellington Street for the purpose of taking some MSS. to a printer, a deafness, which had for some years been increasing on him, rendered him unaware of a rider recklessly urging his horse to furious speed, who either did not see him or was unable to pull up. In consequence a collision took place, and Mr. Baily received a stunning fall, accompanied by a severe scalp-wound. So violent, indeed, was the shock, that he lay for a whole week senseless ; and for an equal period after, his life was considered in imminent danger. His sound and excellent constitution, however, carried him through it, and no ill consequences remained. By the end of September he was enabled to resume the observations of the Cavendish experiment, which this unfortunate occurrence had interrupted, and a few weeks' residence in the country completed the cure.

On the 8th of July, 1842, he was gratified by the observation of a phenomenon which it had from his youth upwards been one of his most ardent wishes to witness, viz., a total eclipse of the sun. To this he looked forward, indeed, with a curiosity peculiarly intense ; having, on the occasion of the annular eclipse of May 15, 1836, which he travelled to Scotland to observe, and which he succeeded in observing under very favourable circumstances at Jedburgh, noticed a very singular phenomenon attending the formation of the annulus ; I mean, the appearance of beads of light, alternating finally

with long, straight, dark threads, cutting across the narrow line of the sun's limb, which he described in a highly interesting paper read to this Society on the 9th December, 1836. On the occasion of the total eclipse, he selected Pavia for his station, that town lying in the path of the centre of the shadow. There, by especial good fortune, he obtained an excellent view of it, and there he witnessed not only a repetition of the phenomenon of the beads, but that much more astonishing and previously unheard-of one, of the flame-like, or conical rose-coloured protuberances, seen to project, as it were, from the hidden disk of the sun beyond the border of the moon. This truly wonderful appearance (which was corroborated by several other observers at different places, among others by Mr. Airy, at Turin) was described by him, on his return from Italy, in a paper read to this Society on the 11th November, 1842; and it is not a little singular, that the two most remarkable solar eclipses on record should thus have furnished the subjects of his first and last astronomical memoirs,—

“*Servatur ad imum
Qualis ab incepto.*”

On his return from this journey he resumed his astronomical labours on the catalogues, as we have seen, which he continued, as well as his usual unremitted attendance to the business and at the meetings of this Society, till the spring of the present year (1844), when his health began to decline, and several weeks of serious illness, a thing utterly unknown to him at any former period of his life, (except as a result of accident,) gave intimation of a failing constitution. For the first time since the re-organisation of the visitation of the Royal

Observatory he was unable to attend the annual meeting of the visitors in June. He, however, rallied somewhat, so as to be able to be present at the commemoration at Oxford on July 2nd, on which occasion the honorary degree of Doctor of Civil Law was conferred on him by that university, as well as on Mr. Airy and Professor Struve. On his return from Oxford his health again rapidly declined, and all efforts of medical skill proving unavailing to relieve an internal complaint (*albuminuria*) which had at length declared itself, he expired, after a protracted, but happily not painful, illness, during which he was fully sensible of his approaching end, in a state of the utmost calmness and composure, at half-past nine o'clock in the evening of the 30th of August, at the age of seventy years and four months.

In passing in review, as I have attempted to do, the scientific works of Mr. Baily, and noticing, as we cannot help doing, the gradual expansion of his views, and the progressively increasing importance of the objects they embraced, we are naturally led to ask by what means he was enabled thus to live as it were two distinct lives, each so active and successful, yet so apparently incompatible with each other? how, in what is generally regarded as the decline of life, he could not only accomplish so much with such apparent ease to himself, but go on continually opening out wider and wider plans of useful exertion in a manner which seems only to belong to the freshness of youth? The answer to such an inquiry is, no doubt, partly to be found in his uninterrupted enjoyment of health, which was so perfect, that he has been heard to declare himself a stranger to every form of bodily ailment, and even to those inequalities of state

which render most men at some hours of the day or night less fit for business or thought than at others. But though this is in itself a blessing of the most precious kind, and, if properly used, a vantage-ground of power and success to any one favoured enough to possess it, it must be regarded in his case as subordinate to, though, no doubt, intimately connected with, a gift of a much higher order,—that of an equable and perfectly balanced intellectual and moral nature,—that greatest of gifts, which has been regarded, and justly, as the only one really worthy to be asked of Heaven in this life,—*mens sana in corpore sano*. Few men, indeed, have ever enjoyed a state of being so habitually serene and composed, accompanied with so much power, and disposition to exert it. A calm, the reverse of apathy, a moderation having nothing in common with indifference, a *method* diametrically opposed to routine, pervaded every part of his sentiments and conduct. And hence it arose that every step which he took was measured and consequent—one fairly secured before another was put in progress. Such is ever the march of real power to durable conquest. Hence, too, it arose that a clear natural judgment, and that very uncommon gift, a sound common sense, viewing all things through a medium unclouded by passion or prejudice, gave to his decisions a certainty from which few were ever found to dissent, and to his recommendations a weight which few thought it *right* to resist.

It is very difficult, in speaking of Mr. Baily's character, to convey a true impression through the medium of a language so exaggerative as that which men now habitually use. Its impressiveness was more felt on reflection than on the instant, for it consisted in the absence of all

that was obtrusive or imposing, without the possibility of that absence being misconstrued into a deficiency,—like a sphere whose form is perfect simply because nothing is protuberant. Equal to every occasion which arose, either in public or private life, yet, when not called forth, or when others occupied the field, content to be unremarked; to speak of his conduct as unassuming, would convey but a faint idea of the perfect simplicity with which he stood aside from unnecessary prominence or interference.

Hardly less inadequate would it be to say of his temper that, always equable and cheerful, it was a source of peace and happiness to himself and others. It was much more,—it was a bond of kindness and union to all around him, and infused into every affair in which the co-operation of others was needed an alacrity of spirit, which was more than a simple reflex of his own good humour. It rendered every relation between himself and others easy and natural, and brought out all the latent warmth of every disposition. One would have been ashamed to evade a duty or refuse a burden when it was seen how lightly his share was borne, how readily he stepped out of his way to offer aid wherever he saw it needed, and how frankly every suggestion was received, and every aid from others accepted and acknowledged. This is the secret of all successful co-operation.

Order, method, and regularity, are the essence of business, and these qualities pervaded all proceedings in which he took a part, and, indeed, all his habits of life. In consequence, all details found their right place and due provision for their execution, in every matter in which he engaged. This was not so much the result of acquired habits in a man of business, as the natural con-

sequence of his practical views, and an emanation of that clear, collected spirit, of which even his ordinary handwriting was no uncertain index. Among hundreds of his letters which I possess, there is hardly an erasure or correction to be found, but every where, on whatever subject, or whatever the haste, the same clear, finished, copperplate characters.

Of his choice of life I have already spoken something. Fortune he regarded as a means to an end, but that end he placed very high ; and fortune, he well knew, though a means to its attainment, was not the only or the chief means. As a member of civilized society, to add something to civilization ; to ennoble his country and improve himself, by enlarging the boundaries of knowledge ; and to provide for his own dignity and happiness by a pursuit capable of conferring both,—these were the ends which he proposed and accomplished. In choosing the particular line which he did, it is impossible too highly to appreciate the self-knowledge and judgment which enabled him to see and adopt those objects best adapted to his powers, and on which they could be, on the whole, most availably and usefully employed. Both in his public and private capacity he was liberal* and generous

* Mr. Baile combined, in a very unusual degree, the opposite qualities of liberality in spending money, and keen attention to getting money's worth for it. The editor of this work was one day walking with him from his own door, when he suddenly went up to a lame little boy who swept the neighbouring crossing, and who had a smart, strong, new crutch. Mr. Baile first put the boy through his paces, and proved that the crutch was of the proper length : he then took it up, and examined it very narrowly in all parts. In walking away he muttered, " I told the man to make the boy a crutch, and I thought he charged quite enough for it,

in the extreme, and both his purse and his influence were ever ready, whether to befriend merit, or to promote objects of public and, especially, of scientific utility.

To term Mr. Baily a man of brilliant genius or great invention, would in effect be doing him wrong. His talents *were* great, but rather solid and sober than brilliant, and such as seized their subject rather with a tenacious grasp than with a sudden pounce. His mind, though perhaps not excursive, was yet always in progress; and by industry, activity, and using to advantage every ray of light as it broke in upon his path, he often accomplished what is denied to the desultory efforts of more imaginative men. Whatever he knew he knew thoroughly, and enlarged his frontier by continually stepping across the boundary and making good a new and well-marked line between the cultivation within and the wilderness without. But the frame of his mind, if not colossal, was manly in the largest sense. Far-sighted, clear-judging, and active; true, sterling, and equally unbiassed by partiality and by fear; upright, undeviating, and candid, ardently attached to truth, and deeming no sacrifice too great for its attainment;—these are qualities which throw what is called genius, when unaccompanied, or but partially accompanied, with them, quite into the shade.

In speaking of his conduct with respect to this Society, and the infinite obligations we owe to him, we must regard him in the first place as the individual to whom,

but I see it is very well made." The writer, who had known Mr. Baily well for many years, was not a little amused with the manner in which the impulse of seeing that the carpenter had earned his money overcame the reserve which he always maintained on the subject of his own beneficent actions.—ED.

more than to any other, we owe the titles of a parent and a protector, and our early consolidation into a compact, united, and efficient body. As Secretary *pro tempore*, the draft of our Rules and the first Address explanatory of our objects, circulated at the commencement of our existence, were entirely, or in great measure, prepared by him; and, governed by these rules with hardly any change, we have continued to flourish for twenty-four years, which is the best test of their adaptation to our purposes. As I have already stated, he acted as Secretary during the first three years of our existence, during which period the business of our meetings and of our council was brought into that systematic and orderly train of which the benefit has never since ceased to be felt. On retiring from this office he was elected Vice-President, and on the next biennial demise of the chair he became our President, an office which he afterwards filled for three subsequent periods of two years, including that of his lamented death. Altogether, during eight years as President and eleven as Vice-President, he filled the highest offices of our institution, and was never off the Council, nor was there any Committee on which he did not sit as one of its most active and efficient members.

With the exception of the Meeting of May 12th, 1836, when he was in Scotland observing the annular eclipse, he was never absent from any Council, nor from any Ordinary, General, or Committee Meeting until prevented by his last illness. Nor during the whole period of the Society's existence was there any matter in which its interests were concerned in which he was not a mover, and, indeed, the principal mover and operator. Nor was this care of our interests

and respectability confined to formal business or to matters of internal management. On every external occasion which offered he bore those interests in mind. He watched and seized the precise opportunity to procure for us from Government the commodious apartments we occupy. He obtained for us the respected and dignified position of Joint-Visitors of the Royal Observatory. He let no opportunity pass of enriching our library with attested copies of the most valuable astronomical documents, such as "Flamsteed's Letters" and "Halley's Recorded Observations." He husbanded and nursed our finances with the utmost judgment and economy, thereby rendering us rich and independent. He printed at his own cost the thirteenth volume of our Transactions, and procured to be defrayed by Government the expense of the seventh, and, by subscription among the members, without intrenching on the funds of the Society, that of the computation and printing of our Catalogue. He prepared all our Annual Reports, and his Addresses from the chair will always be read with pleasure and instruction. He also prepared all Committees' Reports, and translated for reading at our meetings numerous notices and communications in the German language : among others, the memoir relating to the Berlin charts. In fine, he superintended every thing in every department. But it was the manner and delicate tact of this superintendence which gave it its value and rendered it efficient. In respect of this point I may, perhaps, be permitted to use the expressions of a distinguished member of our body, to whom we owe many and great obligations, and who has witnessed the working of its machinery from the beginning, an advantage of which for some years I have myself

been deprived by non-residence in London and absence from England. "Of his management of our Society," says Mr. Sheepshanks, "it is difficult to speak so as to convey a correct idea. No assumption, no interference with other people, no martinet spirit (which seems almost natural to all good business men), but every thing carried on smoothly and correctly, and without bustle. He hit, better than any chairman I have even seen, the mean between strictness and laxity ; and, while he kept every thing going in its proper channel, he also kept every body in good humour. This natural tact was a great gift ; but there was another quality which I never saw in any one but him, and that was his readiness to give precedence and room to every one who wished to do any thing useful, and his equal readiness to supply every deficiency and do the work of every body else. He was also the person who never was asleep and never forgot any thing, and who contrived, by his good humour, hospitality, and good sense, to keep every thing in train." To much of this view, as a matter of general character, I have given my own independent expression, but I could not deny myself the satisfaction of corroborating my own judgment by that of one so well qualified, from intimate knowledge, to form opinions.

Mr. Baily, as I have already stated, was a Member of the Royal, Geological, and Linnean Societies, to which I may also add the Royal Irish Academy and the Society of Civil Engineers. In the Royal Society his eminence as an astronomer and a man of general science made his presence valuable, and the universal respect in which he was held gave him much influence. He filled in that body the office of Vice-President for six years, of Trea-

surer for three, and was fifteen times elected on the Council. I have already mentioned two of the three papers he contributed to its transactions. The third contains a minute account of the standard barometer of that Society, fixed up in their apartments in the year 1837, in which he enters into every particular of its construction, mode of registry, and corrections. It was read on the 16th of November, 1837. He was also one of the earliest members of the Royal Geographical Society, and took a very active part in its establishment. He was also a member and one of the trustees of the British Association, at whose meetings he was an occasional attendant, and acted, as we have seen, on some important committees. In 1835, the University of Dublin conferred on him the honorary title of Doctor of Civil Law, as, I have already stated, was also done by Oxford in 1844. Among the foreign Academies which in honouring him honoured themselves, I find him to have been a correspondent of the Royal Institute of Sciences of Paris, and of the Royal Academies of Berlin, Naples, and Palermo, as well as of the American Academy of Arts and Sciences at Boston.

His portrait, by Phillips, presented by some Fellows of the Society, has long adorned, and though for the present removed from its frame, will speedily again adorn, our meeting-room. May his mantle descend on our future Presidents, and his spirit long continue to preside over our councils and animate our exertions in the cause he had so much at heart !

LIST
OF
MR. FRANCIS BAILY'S PUBLICATIONS,
Chronologically Arranged.

1. Tables for the Purchasing and Renewing of Leases for Terms of Years certain and for Lives, with Rules for determining the Value of the Reversion of Estates after any such Leases, and for the solution of other useful Problems, adapted to general use; to which is added an Appendix. London, 1802. 8vo.
Second Edition, 1807.
Third Edition, 1812.
2. The Rights of the Stock-Brokers defended against the attacks of the City of London. London, 1806. 8vo.
3. The Doctrine of Interest and Annuities analytically investigated and explained, together with several useful Tables connected with the subject. London, 1808. 4to.
4. An Account of the several Life-Assurance Companies established in London, containing a View of their respective merits and advantages. London, 1810. 8vo.
Second Edition, 1811.
5. The Doctrine of Life-Annuities and Assurances analytically investigated and practically explained, together with several useful Tables connected with the subject. London, 1810. 8vo.
(This work has been lately translated and published in France under the following title :—
"Théorie des Annuités viagères et des Assurances sur la Vie, suivie d'une Collection de Tables relative à ces matières, par FRANCIS BAILY. Traduit de l'Anglais par ALFRED DE COURCY, et publié par la Compagnie d'Assurances générales sur la Vie. Paris, 1836.")
6. On the Solar Eclipse which is said to have been predicted by Thales. Read before the Royal Society, March 14, 1811. *Phil. Trans.*, 1811.

- 7.* A Synopsis of the Principal Elements of Astronomy, deduced from M. Laplace's *Exposition du Système du Monde*. London, 1812. 8vo.
8. A New Chart of History. Large Sheet. London, 1812.
Corrected to 1817, with the Third Edition of the following work :
 9. Description and Use of a New Chart of History, exhibiting the most material Revolutions that have taken place in the principal Empires, Kingdoms, and States, from the earliest authentic Records to the commencement of the present Year. London, 1812. 8vo.
Second Edition, 1813.
Third Edition, 1817.
10. An Appendix to the Doctrine of Life Annuities and Assurances, containing a Paper read before the Royal Society, on a New Method of Calculating the Value of Life-Annuities. London, 1813. 8vo.
(By this Appendix the Doctrine of Life-Annuities, &c., was divided into 2 vols.)
11. An Epitome of Universal History, Ancient and Modern, from the earliest authentic Records to the commencement of the present Year. London, 1813. 2 vols. 8vo.
12. Report of the Sub-Committee of the Stock-Exchange relative to the late Fraud. London, 1814. 8vo.
Second Report of the Sub-Committee of the Stock-Exchange relative to the late Fraud. London, 1815. 8vo.
13. Report of the Committee of the Stock-Exchange appointed for the Distribution of the Money stopped on Account of the late Fraud. London, 1815. 8vo.
14. Memoir relative to the Annular Eclipse of the Sun, which will happen on September 7, 1820. London, 1818. 8vo. with a Map.
(Not published for sale.)
15. On the *Nautical Almanac*. *Phil. Mag.* for April, 1819. Vol. LIII. p. 217.

* I very much doubt that this work was actually published, though such a publication was intended. See the additions to the life at the end of this list.
—Ed.

16. Memoir on a New and Certain Method of ascertaining the Figure of the Earth by means of Occultations of the Fixed Stars. By A. Cagnoli, with Notes and Appendix. London, 1819. 8vo.
(Not published for sale.)
17. Address Explanatory of the Views and Objects of the Astronomical Society. London, 1820. 8vo.
(Also nearly the whole of the Society's Annual Reports till the year 1844, inclusive.)
18. On a Method of Fixing a Transit Instrument exactly in the Meridian. Read June 9, 1820. *Mem. Ast. Soc.* Vol. I. p. 59.
19. On the Apparent Place of the Pole Star at the time of its upper Culmination for the years 1820, 1821, and 1822. *Phil. Mag.* 1820. Vol. LV. p. 401.
20. Tables by the Board of Longitude. *Phil. Mag.* 1820. Vol. LVI. p. 288.
21. On the Solar Eclipse which took place on September 7, 1820. Read December 8, 1820. *Mem. Ast. Soc.* Vol. I. p. 135.
22. Astronomical Tables and Remarks for the year 1822. With a Map. London, 1822. 8vo.
(Not published for sale.)
23. Remarks on the present Defective State of the *Nautical Almanac*. London, 1822. 8vo.
24. On a New Method of determining the Latitude of a Place by Observations of the Pole Star. *Phil. Mag.* 1822. Vol. LIX. p. 445.
25. Astronomical Information. *Phil. Mag.* 1822. Vol. LX. p. 388.
26. On some New Tables of Aberration and Nutation. *Phil. Mag.* 1822. Vol. LX. p. 279.
27. On some New Tables for determining the Time by means of Altitudes taken near the Prime Vertical. Read January 10, 1823. *Mem. Ast. Soc.* Vol. I. p. 315.
28. Supplementary Table for computing the Precession and Nutation of the Fixed Stars. *Phil. Mag.* 1823. Vol. LXI. p. 217.
29. On the New Tables of Aberration, Nutation, and Precession. *Phil. Mag.* 1823. Vol. LXI. p. 366.

30. Astronomical Information. Mr. Pond and M. Bessel. *Phil. Mag.* 1823. Vol. LXI. p. 469.
31. On M. Inghirami's List of Occultations of the Fixed Stars. *Phil. Mag.* 1823. Vol. LXII. p. 161.
32. Astronomical Information. *Phil. Mag.* 1823. Vol. LXII. pp. 391 and 466.
33. Mr. Pond and M. Bessel. *Phil. Mag.* 1823. Vol. LXII. pp. 390 and 467.
34. On the Mercurial Compensation-Pendulum. Read May 9. and June 13, 1823. *Mem. Ast. Soc.* Vol. I. pp. 381-420, with a Plate.
35. On the ensuing Opposition of Mars. *Phil. Mag.* 1824. Vol. LXIII. p. 50.
36. On the Circular Micrometer. *Phil. Mag.* 1824. Vol. LXIII. p. 167.
37. On Mr. Babbage's New Machine for Calculating and Printing Mathematical and Astronomical Tables. *Phil. Mag.* May, 1824. Vol. LXIII. p. 335 ; and *Ast. Nach.* No. 46.
38. On the Occultation of the *Georgium Sidus*. *Phil. Mag.* 1824. Vol. LXIII. p. 458.
39. Astronomical Discovery (Bessel). *Phil. Mag.* 1824. Vol. LXIV. p. 67.
40. New Lunar Tables by M. Damoiseau. *Phil. Mag.* 1824. Vol. LXIV. p. 68.
41. On the Method of determining the Difference of Meridians by the Culmination of the Moon and Stars ; with an Appendix and a List of Stars applicable to the purpose for the year 1825. Read April 9 and May 14, 1824. *Mem. Ast. Soc.* Vol. II. p. 1.
42. A Statement of some Circumstances connected with the Mode of contracting the Columbian Loan in 1824. London, 1825. 8vo.
43. Astronomical Information. *Phil. Mag.* 1825. Vol. LXV. p. 466.
44. Errors in Piazzi's Catalogue of Stars. *Phil. Mag.* 1825. Vol. LXVI. p. 261.
45. Notice respecting the Opposition of Mars. *Phil. Mag.* 1825. Vol. LXVI. p. 465.

46. An Address delivered at a Special General Meeting of the Astronomical Society of London, on April 14, 1826, on presenting the Gold Medals to J. F. W. Herschel, Esq., J. South, Esq., and Professor Struve. *Mem. Ast. Soc.* Vol. II. p. 541.
47. Astronomical Tables and Formulæ, together with a variety of Problems explanatory of their use and application. To which are prefixed the Elements of the Solar System. London. 1827. 8vo.
48. Astronomical Collections, No. I., containing a Catalogue of Zodiacal Stars. London, March, 1827. 8vo.
(Not published for sale.)
49. New Tables for facilitating the Computation of Precession, Aberration, and Nutation of 2881 principal Fixed Stars; together with a Catalogue of the same reduced to Jan. 1, 1830. To which is prefixed an Introduction explanatory of their construction and application. London, 1827.
Appendix to Vol. II. *Mem. Ast. Soc.*
50. Further List of Errors in Piazzi's Catalogue of Stars. *Phil. Mag.* 1827. Vol. I. p. 19.
51. List of Moon-culminating Stars for 1827. *Phil. Mag.* 1827. Vol. I. (new series) p. 47.
52. On some new Auxiliary Tables for determining the Apparent Places of the Greenwich Stars. *Phil. Mag.* for 1827. Vol. I. p. 81.
53. On the Royal Observatory at Palermo. *Phil. Mag.* 1827. Vol. II. p. 81.
54. On the Right Ascension of γ Cassiopeiæ. *Phil. Mag.* 1828. Vol. III. p. 64.
55. New Astronomical Ephemeris. *Phil. Mag.* 1828. Vol. IV. p. 141.
56. On a new Micrometer, principally intended for the Construction of a more complete Map of the Heavens. By M. Steinheil. *Phil. Mag.* 1828. Vol. IV. p. 173.
57. Further Remarks on the present Defective State of the *Nautical Almanac*; to which is added an Account of the new Astronomical Ephemeris published at Berlin. London, Jan. 1829. 8vo.
(Extracted from the Appendix to "Astronomical Tables and Formulæ.")

58. A Letter to the Editor of "The Times," and inserted in that paper April 17, 1829.
59. On the Discordances in the Results of the Methods for Determining the Length of the Simple Pendulum. *Phil. Mag.* 1829. Vol. V. p. 97.
60. Appendix to Lieut. H. Foster's Paper on the Longitude of Port Bowen, by the Method of Moon-culminating Stars. London, 1829. *Mem. Ast. Soc.* Vol. III. p. 43.
61. A Catalogue of the Positions (in 1690) of 564 Stars observed by Flamsteed, but not inserted in his British Catalogue ; together with some Remarks on Flamsteed's Observations. Read May 8, 1829. *Mem. Ast. Soc.* Vol. IV. pp. 129-164.
62. On the System of Prize Chronometers at Greenwich. *Phil. Mag.* 1829. Vol. VI. p. 424.
63. On Mr. Pond's recent Catalogue of the Places of 720 principal Stars, compared with the Places of the same Stars in the Catalogue of this Society ; with Remarks on the Differences between the two Catalogues. Read March 12, 1830. *Mem. Ast. Soc.* Vol. IV. pp. 255-290.
64. Mayer's Catalogue of Stars, corrected and enlarged ; together with a Comparison of the Places of the greater part of them, with those given by Bradley, and a reference to every Observation of every Star. Read June 11, 1830. *Mem. Ast. Soc.* Vol. IV. pp. 391-445.
65. Report of the Committee of the Astronomical Society of London, relative to the Improvement of the *Nautical Almanac*. Adopted by the Council, November 19, 1830 : approved by the Right Honourable Lords Commissioners of the Admiralty, and ordered by them to be carried into effect. *Mem. Ast. Soc.* Vol. IV. p. 447.
66. On the New *Nautical Almanac*. *Phil. Mag.* 1831. Vol. IX. p. 23.
67. Lacaille's Catalogue of 398 principal Stars, together with a Comparison of the Places of such as are visible in this Latitude with those given by Bradley, and a reference to every Observation of every Star. Read April 8 and May 13, 1831. *Mem. Ast. Soc.* Vol. V. pp. 93-124.
68. On the Proper Motion of the Fixed Stars : with a List of

those which are known, or supposed, to be materially affected by such a motion. Read Dec. 9, 1831. *Mem. Ast. Soc.* Vol. V. pp. 147-170.

69. On the Visitation of Greenwich Observatory, with a Copy of the New Warrant. *Phil. Mag.* 1831. Vol. IX. p. 72.
70. On the Computation of the Moon's Motion in Right Ascension. *Phil. Mag.* 1831. Vol. IX. p. 241.
71. On the Correction of a Pendulum for the Reduction to a Vacuum: together with Remarks on some Anomalies observed in Pendulum Experiments. Read May 31, 1831. *Phil. Trans.* 1832. pp. 399-492.
72. An Account of Experiments with an Invariable Pendulum, during a Russian Scientific Voyage by Captain Luetke. *Phil. Mag.* 1832. Vol. I. p. 420.
73. An Address delivered at the Annual General Meeting of the Royal Astronomical Society, on Feb. 8, 1833, on presenting the Honorary Medal to Professor Airy. *Mem. Ast. Soc.* Vol. VI. pp. 247-256.
74. Report on the Pendulum Experiments made by the late Capt. Henry Foster, R.N., in his Scientific Voyage in the years 1828-1831, with a view to determine the Figure of the Earth.

Printed at the public expense, and forming the seventh volume of the *Memoirs of the Royal Astronomical Society*. 1834. 4to.

75. Some Account of the Astronomical Observations made by Dr. Edmund Halley, at the Royal Observatory at Greenwich. Read Nov. 14, 1834. *Mem. Ast. Soc.* Vol. VIII. pp. 169-190.
76. An Address delivered at the Annual General Meeting of the Royal Astronomical Society, Feb. 13, 1835, on presenting the Honorary Medal to Lieutenant Johnson. *Mem. Ast. Soc.* Vol. VIII. p. 298.
77. An Account of the Rev. John Flamsteed, the first Astronomer Royal, compiled from his own Manuscripts and other authentic Documents, never before published. To which is added, his British Catalogue of Stars, corrected and enlarged. London, 1835. 4to.

(Printed at the public expense.)

78. Report on the New Standard Scale of this Society. Presented December 11, 1835. *Mem. Ast. Soc.* Vol. IX. p. 35.
79. On a Remarkable Phenomenon that occurs in Total and Annular Eclipses of the Sun. Read Dec. 9, 1836. *Mem. Ast. Soc.* Vol. X. p. 1.
80. Supplement to the Account of the Rev. John Flamsteed. London, 1837. 4to.
(Printed at his own expense for private circulation only.)
81. An Address to Astronomical Observers relative to the Improvement and Extension of the *Astronomical Society's Catalogue of 2881 Stars*. London, 1837. 4to.
(For private circulation only.)
82. On the Non-existence of the star 42 *Virginia*. *Monthly Notices of the Roy. Ast. Soc.* June 9, 1837.
83. On the Repetition of the Cavendish Experiment. *Monthly Notices of the Roy. Ast. Soc.* Dec. 8, 1837.
84. Description of a New Barometer, recently fixed up in the Apartments of the Royal Society; with Remarks on the Mode hitherto pursued at various periods, and an Account of that which is now adopted for correcting the observed Height of the Mercury in the Society's Barometers. *Phil. Trans.* 1837, p. 431.
85. An Address delivered at the Annual General Meeting of the Royal Astronomical Society, Feb. 8, 1839, on presenting the Honorary Medal to the Hon. John Wrottesley. *Mem. Ast. Soc.* Vol. XI. p. 306.
86. Experiments with the Torsion-Rod for Determining the Mean Density of the Earth. *Mem. Ast. Soc.* Vol. XIV.
(Printed partly at the Government expense.)
87. The Catalogues of Ptolemy, Ulugh Beigh, Tycho Brahe, Halley, Hevelius, deduced from the best Authorities; with various Notes and Corrections, and a Preface to each Catalogue. To which is added the synonym of each Star in the Catalogues of Flamsteed or Lacaille, as far as the same can be ascertained. Forming Vol. XIII. of *Mem. Ast. Soc.*
(Printed at his own expense.)
88. Some Remarks on the Total Eclipse of the Sun, on July 8, 1842. *Mem. Ast. Soc.* Vol. XV. p. 1.

89. *Posthumous.* The Catalogue of Stars of the British Association for the Advancement of Science; containing the mean right ascensions and north polar distances of 8377 fixed stars, reduced to January 1, 1850: together with their annual Precessions, secular Variations, and proper Motions, as well as the logarithmic constants for computing Precession, Aberration, and Nutation. With a preface explanatory of their construction and application. By the late Francis Baily. . . . London, 1845, 4to. [Superintended, after Mr. Baily's death, by Dr. Robinson, Professor Challis, and Lieut. Stratford, R.N.]
90. *Posthumous.* A Catalogue of 9766 Stars in the Southern Hemisphere, for the beginning of the year 1750, from the Observations of the Abbé de Lacaille made at the Cape of Good Hope in the years 1751 and 1752. Reduced at the expense of the British Association for the Advancement of Science, under the immediate superintendence of the late Professor Henderson, director of the Royal Observatory, Edinburgh, and printed at the expense of her Majesty's Government, under the direction of the late Francis Baily, Esq. With a preface by Sir J. F. W. Herschel. London, 1847, 8vo.
91. *Posthumous.* A Catalogue of those Stars in the *Histoire Céleste Française* of Jérôme Delalande, for which tables of reduction to the epoch of 1800 have been published by Professor Schumacher. Reduced at the expense of the British Association for the Advancement of Science, under the immediate superintendence of the late Francis Baily, Esq. Printed at the expense of her Majesty's Government. London, 1847, 8vo. [Superintended, after Mr. Baily's death, by Sir J. F. W. Herschel, G. B. Airy, Astronomer Royal, and Lieut. Stratford, R.N. The number of stars is 47,390.]

. *The following additions to the preceding Memoir appear in the Annual Report of the Council of the Royal Astronomical Society for 1853-4, read February 10, 1854.*

Though it is not usual to introduce supplements to obituary notices contained in former Reports, yet the interest which is here felt in all that relates to Francis Baily will justify the statement of some facts relative to his early life, which have been brought out by a recent examination of his correspondence, and of the journal of his voyage in America.

Perhaps the earliest mention of his name in print is in the proceedings of the American Congress. The Spanish authorities had imposed various hardships upon citizens of the United States and other foreigners, by the depreciation of their coinage; and in the discussions which took place at Washington upon this subject, the name of Baily is cited as one of the parties aggrieved. It distinctly appears that one of the objects of his tour was the formation or extension of commercial connexion, probably of some house in England. It also appears that during his voyage he gave formal notice of his intention to apply for the privileges of citizenship, with a view to take up his permanent residence in the United States; and further, that his friends in England were made cognisant of this intention. Some allusions to a young lady seem to give the reason of this contemplated change of country; but nothing is found which explains the abandonment of the plan. Two subjects are concealed in short-hand: one is that which has just been hinted at; the other is the expression of his feelings towards Washington, for whom he entertained a respect, the depth

of which may best be judged of from the description of his mode of recording it.

On his return to England, he seems for some time to have had no decided plan, except that of adopting some life of active adventure. In May, 1798, he was seeking a commission in the militia, and an ensigncy in the volunteer company of the Berkshire corps was actually offered. In December of the same year, he had been inquiring as to the means of obtaining a commission in the Engineers; and a letter from Bonnycastle, which represents the impossibility of such a thing, hints at the East India Company's Service, and informs him that several officers and other gentlemen are soon going to Turkey. In May, 1799, he applied to the African Association, with an offer to enrol himself in their service as a traveller, and by a letter from Sir Joseph Banks, (June 11), it appears, that, if there had been sufficient funds, his offer might have been seriously considered. In a private letter to Sir John Stepney (Sept. 18, 1799) is the following passage:—"I had proposed to myself a route which should be less circuitous than those of Park or Horneman, namely, to proceed northwardly, or north-eastwardly from Calabar or Wydah, till I should strike the Niger. I had the subject so much at heart, that I would have gone through any trials to have accomplished my object. With respect to the difficulties and dangers of such an undertaking, they would, no doubt, have been many; but they are things which much experience of this mode of travelling in the New World has induced me to think light of. I can even say with Horace, *Dulce periculum est*. So true is it that habit and custom can soon efface those disagreeable sensations which arise from some

of the rough accidents of life. After a number of fruitless attempts to succeed in my object, and meeting with so little encouragement in the prosecution of it, I have at length determined to give it up; and an event is about to take place which most probably will prevent my ever resuming it—this is, my going to enter into partnership with an eminent stockbroker in the City.”

All this time it appears that Baily was paying close attention to mathematics, astronomy, and botany. The earliest astronomical writing of his now extant is a paper (dated October, 1798), written apparently for his own instruction, containing a description of a neatly drawn projection of the heavens after sunset on April 5, 1799, at which time he says, “all the planets in our system will be above the horizon at the same time, forming a line along the ecliptic from the most westerly point to near the zenith.”

The origin of the work on “Tables and Formulæ,” is in a manuscript having the title “Elements of Astronomy, deduced from M. Laplace’s ‘Exposition du Système du Monde.’” London, 1810. This manuscript, most neatly written, was certainly intended for publication; and by being marked in pencil “Communicated by Francis Baily, Esq.,” and “25 copies for Mr. Baily,” it seems to have been drawn up for some society for mutual instruction, or other private association.

To complete what was said on Baily’s writings in Sir John Herschel’s Memoir of his life, it may be added that a large mass of his astronomical papers and correspondence, including much of the account of Flamsteed, and the whole of the Catalogue, is, or will be, deposited at Greenwich. The manuscripts of the works on Leases, on Inte-

rest, and on Annuities, are in the library of the Institute of Actuaries. An account of his correspondence with Mr. George Barrett, which was the means of laying before the world one of the greatest improvements ever made in the calculation of life contingencies, will appear in the "Assurance Magazine" for April (1854) next.

(*Pages 9-11 and 31-35.*) Subsequent investigations require the following remarks on the eclipse of Thales, and on the standard scale.

The recent elaborate researches of Mr. Airy, (undertaken on doubts suggested by Mr. Baily's remark, that no single correction would reconcile the eclipse of Thales with that of Agathocles,) conducted upon the latest improvements in the lunar theory, have led him to reject the eclipse of 610 B.C., and to substitute for it that of May 28, 585 B.C., changing the locality of the battle from the mouth of the river Halys to Issus, at the head of the Mediterranean, which accords even better with the statement of Herodotus. By this change of place and date the two eclipses are reconciled with each other, and with the improvements in the lunar theory.

The anticipations of the permanence and accuracy of the record of length to be obtained from the Astronomical Society's standard have scarcely been justified by its subsequent history. In the year 1835 the Astronomical Society's standard was compared by Mr. Baily with the tubular standards of similar construction, one the private property of Mr. Baily, and the other belonging to Mr. Simms. The same standards were again compared by Mr. Baily, by use of the same comparing apparatus, in the

year 1844. On collating the two comparisons, it was found that the relation between the lengths of the different standards had altered by $\frac{1}{4000}$ of an inch. In 1854 Mr. Sheepshanks repeated the comparisons, and his results agreed with those of Mr. Baily in 1844, in showing that the relation of lengths had changed, although the amount of change appeared somewhat less than Mr. Baily had found it.

Mr. Baily, however, in 1844, put the permanence of the standard to a severer proof. The Astronomical Society's standard (cylindrical in form) leaves four sets of marks, each set defining very approximately a measure of five feet, at four equidistant parts of the cylindrical circumference. Those four measures were compared by Mr. Baily in 1834, and again in 1844. Their relative lengths had sensibly altered: in two instances by more than $\frac{1}{6000}$ of an inch.

In consequence of these anomalies, the Astronomical Society's standard was not used by Mr. Sheepshanks in the restoration of the national standard of length.

JOURNAL OF A TOUR, &c.

ON *Wednesday*, the 21st of *October*, 1795, I embarked on board the *Jay*, Capt. O'Brien, bound to New York, then lying at Gravesend. Whilst we lay in the river, the brig *Harlequin*, of Belfast, ran foul of us, and carried away our bowsprit and cutwater, which detained us a day or two longer than we expected, so that we did not reach the Downs till the 25th. Here the pilot left us, and we lay amidst a fleet of upwards of a hundred sail, waiting for a fair wind to take us out of the Channel. The weather had been calm for some days before, and the wind westerly, so that we had every reason to expect that a favourable breeze would spring up before any great length of time elapsed. But how soon may our hopes and expectations be clouded over by adverse and unforeseen contingencies! for, on the night of the 29th, whilst we were at supper in the cabin, a most violent gale of wind sprung up, almost as sudden as it was unexpected. The damage which it did that night in the Downs, and in other places along the coast as well as ashore, is still in the recollection of many. Most of the ships parted their cables, and drifted about without being able to bring up; some ran foul of each other, many

were driven on the Goodwin Sands, and others foundered at their anchors. The first notice of any danger which we received, was the sight of a ship drifting towards us, and which we had scarcely discovered, before we expected every moment that she would run foul of us. This we endeavoured to avoid by *paying out* more cable, and manœuvring the ship to keep out of her track ; but all to no purpose, we were so surrounded by shipping, that equal danger seemed on every side, and all we could do was to stand by and wait the event, as she was fast approaching towards our starboard quarter. In a few moments she came with her bowsprit athwart our gunwale : the former was immediately broken in pieces by the violence of the stroke. The horrid crash arising from this, and from our rigging and quarter-boards being all carried away at the same time, together with the violent concussion given to the ship by such an immense body striking her so forcibly, raised in us apprehensions that the ship had received some considerable damage ; but whilst we were employed in ascertaining this fact, another unlucky ship which had parted her cables, and been driven about at the mercy of the winds, attacked us on the *other* quarter, so that we were absolutely between two fires, and in a very dangerous situation. It was now about ten o'clock : the sea, which but a few hours before had been nearly calm, now ran mountains high ; and by the alternate elevation and depression of its waves, we received several reiterated and repeated shocks from our two neighbouring foes. At length one of them veered round under our *bows* and cut our cable ; the consequence was, that we drifted away, and escaped the imminent danger to which we had been exposed. We directly let go our

other anchor ; but the cable, being very old and rotten, parted immediately, the wind still blowing very heavy, and the sea running exceedingly high, and both united drifting us towards the Goodwin Sands, so that a still more imminent danger seemed to await us than that from which we had just escaped. Thus we were in a state of forlorn hope,—both anchors gone, and the wind and tide setting us on towards that spot which has been the grave of many a seaman ! At length we got the remaining part of the broken cable *bent* to a large sheet anchor which we had below deck, and heaving it overboard, after dragging for some time it brought us up about twelve o'clock within a cable's length of the breakers. Here we waited with anxious suspense till the morning, when a Deal pilot, seeing our precarious situation, came off to our assistance, and took charge of the ship ; and the day after, the storm having abated, we got into Ramsgate harbour to refit.

It was truly a deplorable sight to see the havoc made amongst the shipping by this dreadful hurricane : the greatest part of them had suffered very materially, and were obliged to return to port to repair their damages. One vessel, a transport, which lay alongside us, went down at her anchors ; two others, which lay not far distant, we saw towed into the harbour with the loss of *all* their masts. One of them was laden with Hessian soldiers, bound to Cork, and it was some time before they could get permission to be landed, being foreign troops in actual service ; so that the poor distressed objects were obliged to remain aboard the ship till they could get an order for their removal.

Monday, November 9th.—This morning, the wind

springing up from the eastward, and our damages being repaired, the signal was hoisted for sailing, and about twelve o'clock we all got on board. The number of passengers, besides myself, was five, amongst whom was one lady. We were the last of near fifty sail of vessels that sailed out of the harbour this morning, all bound down Channel ; but, crowding all the sail we could, and having a favourable breeze, we came up with most of them before night, and next morning left them all behind, our ship sailing remarkably fast. It is a most charming sight to see so many vessels under sail at the same time, to remark their different manœuvres and observe their signals, to notice their earnest efforts to get a head of each other, and the apparent mortification of those who are not able to keep up with the rest. This, together with that pleasing sensation of being carried on with a great rapidity of motion without any labour or trouble,* added, perhaps, to the novelty of the scene, made me for the moment quite fascinated with a seafaring life, and tended to remove a little of that dejection so natural to a person leaving his native country, perhaps for ever!

November 11th.—Got abreast of Scilly lighthouse this morning by six o'clock, having had a fine run down the Channel in forty-two hours. This being the last land we see till our arrival on the American coast, we therefore took our *departure* from it ; that is, the latitude and longitude of this place being well ascertained, we made it a point from which to calculate, and to which to refer all our daily reckonings during the voyage. The common principles of navigation, sufficient to keep a ship's reckon-

* Dr. Johnson used to remark that few things were more pleasant than being whirled along rapidly in a post chaise.

ing, are very easily learned without going into the great depths of the science ; and it would not only be found a very pleasant amusement during the many *vacant* hours aboard a ship, if a part of the time were employed in this manner, but would also tend to give clearer ideas of geographical and nautical science than otherwise might be obtained.

After being a few days out of sight of land, and not having seen anything to relieve the eye from that sameness of appearance in the sea and heavens which takes place on being immersed into the bosom of the wide ocean, I began to think of Dr. Johnson's opinion of a seafaring life, and could not help partially admiring the justness of the remark.* Still, however, if there be pleasant company aboard, and if you take care to furnish yourself with books, draughts, cards, music, or any other thing which may serve to banish *ennui*, the time will appear not only free from weariness, but at times may be spent as agreeably as on shore. Reading as well as writing will be very irksome at first, owing to the motion of the ship ; and it is some time before one can acquire a *countermotion* to oppose its effects.

Dr. Franklin recommends to persons going a voyage to take rusks with them, or pieces of bread baked over again, supposing that they would soon get tired of biscuit. For my own part, if ever you think of taking a trip across the Atlantic, I should recommend the former ; but that which would supersede the use of either would be the taking of a little yeast on board, just before you start ;

* A ship (says he) is worse than a gaol. There is, in a gaol, better air and better company, better conveniency of every kind ; and a ship has the additional disadvantage of being in danger.

by this means you may have new bread every day, as almost every ship has an oven on board. Besides the stores laid in by the captain for the use of the passengers, I would recommend every person to lay in a small private stock* on his own account of those things for which he thinks he may have most occasion ; particularly such as, not being immediately necessities, are often overlooked by the captain, as oranges, apples, raisins, lemons, and other fruit : they will prove very pleasant and acceptable at all times, but still more so if sickness takes place. In this latter case, tapioca or sago, boiled in a little water, and mixed with some white wine and sugar, will be very grateful, as well as nourishing ; it is soon taken up in the circulation, and does not load the stomach so much as animal food.

December 14th.—We had been out now thirty-five days, and were, by our reckoning, within one or two days' sail of New York : our passage had not been long ; and we began to anticipate the pleasure of setting our feet once more on *terra firma*. But our hopes were here, as in the first outset, cut short by the precarious winds. The whole day it had blown very hard from the north-west ; and every succeeding moment gave symptoms of a storm near at hand ; we accordingly *lay-to* under our foresail, and waited with anxious suspense its result. Towards night we found the gale had increased considerably ; however, seeing we could be of no service upon deck, we turned in and went to bed. The wind whistled through the rigging, and the waves dashed against the sides of the

* This is recommended by most voyagers, and particularly by Dr. Franklin ; yet it is a thing which is very little attended to, till persons have found the want by experience.

ship, so that it was with difficulty we could hear each other speak : and this, independent of anything else, was enough to banish sleep from our eyes ; yet it at last overtook us, and we remained locked up in its silken bands, unconscious of harm, or unsuspecting danger, till we were awakened by a violent concussion of the ship, attended with a most hideous crash. It was not long ere I was on deck to learn the cause, and found that *a sea* had struck her on the larboard bow, and carried away the binnacle, the two boats, hencoops, and every thing else on the deck ; happily, no lives were lost. It blew most tremendously hard, the sea ran mountains high, and seemed to groan most horribly at this conflict of nature, this war of elements. I could not help admiring the sublime spectacle, and observing how much the science of navigation and naval architecture had been improved since its first discovery. When I reflected on the little row-boats of which they made use in former days, and their being obliged always to keep inland, and push into a harbour on the first appearance of a storm ;* and when I contrasted that with the present improved state of the art and science (when such enormous bodies carrying such heavy pieces of artillery are made use of ~~not~~ only for the purposes of commerce, but also of **war** and attack, by which a great part of the human race are actually become *tenants of the ocean*) ; or when I contrasted it with my then present situation, tossed and buffeted about at the mercy of the winds and waves, sometimes apparently raised to the clouds above, and the next moment sunk into the abyss below, and as sud-

* Anderson, vol. i. Intro. p. 81. Robertson's History of America, vol. i. p. 5.

denly overwhelmed by the surrounding waves, I could not help thinking what praise was due to those who had by their exertions tended to bring naval architecture and the science of navigation to their present state of perfection ; and I am proud to acknowledge my countrymen amongst the first promoters of this art and science. For my own part, I rank Columbus and Cook amongst the highest ornaments of the three last centuries ; and I take equal pleasure in seeing a square-rigged vessel proportionate in all its parts, as in viewing the most perfect models of Grecian architecture. But, to return from this digression. The gale in which we were continued to increase without intermission for three days, when it blew a perfect hurricane. During this time we learned that the ship was considerably out of repair, and had suffered very much from the storm ; that her *beam-ends* were rotten, her sternposts loose, her iron works almost all rusted away, her rudderbolts loose, her decks very much out of repair, and that she wanted oakum in every part of her. In this predicament it was not to be supposed we thought ourselves very safe. She was almost a wreck, and at one time made so much water, that we were obliged to keep both pumps going. Accordingly, on the third day,—

December 17th.—The captain, finding he could not gain the coast, that the wind had no appearance of abating, and that the ship was unable to stand against the hurricane any longer, put her about, and resolved to bear away for the Island of Bermuda, so celebrated by Waller, which lies in N. L. 32° 20', W. L. 65°, and which was the nearest port to which he could run. We had not been many hours on this tack before we discovered a number of staves and

spars floating on the surface of the ocean, which seemed to increase in quantity the further we proceeded. The captain immediately conceived the sad catastrophe, and ordered all hands aloft to look out for a wreck. In about half an hour one of the men from the fore-top-mast head descried something, he could not tell *what*. We accordingly bore down for it, and on coming up with it, found it to be a brig, which had been upset apparently the night before. Her keel was upwards, and the masts (which were broken off, and retained by the rigging) appeared to be fresh broken. She had no name on her stern. All hands were ordered aloft again to look out for her boat, to see if happily any of the crew escaped ; but our efforts were unsuccessful, and we had every reason to believe they met with a watery grave. We supposed she was laden with staves and spars upon the deck ; and that in *scudding* a sea had struck her on her quarter and upset her ; in which case there would be no probability of any of the crew escaping, the event being so instantaneous. I must confess this sight affected us very much, and raised in us a sense of gratitude for our preservation somewhat deeper than what we might otherwise have been impressed with had we not seen it. It is astonishing what great risks the New England ~~men~~ will run sometimes, in endeavouring to save their property. I have known them, when, in a gale of wind, their main deck has been covered with spars lashed to each other, to stand with the axe in their hand, and to run till the last moment, at the imminent peril of being upset ; and when they have at last observed the sea coming to strike them in a dangerous quarter, they have cut the lashings and let all go.

It was not long ere we came into the latitude of Bermuda, the wind being very favourable; and by our stretching so far to the south-west and going right before the wind, we soon got out of those violent north-westerly gales which almost continually infest the American coast. The Bermuda Islands lying very low are not seen at any great distance, which makes them so difficult to *make*, that is, *to be discovered*. We beat about here for three days without being able to discover land, amidst the most tempestuous weather; with which, it is* observed, these islands are generally troubled. After carrying away our mizen-topmast, and springing our fore-top, and tearing our sails to pieces, we were obliged to give up the pursuit, and bear away to the Island of Antigua.

In going from Bermuda to Antigua, we crossed what are called the Horse Latitudes, extending from lat. 26° to 28°, and so called from the great destruction of horses between these limits; for it is observed that it almost always blows a hurricane here, or is a dead calm; and as the New England men trade a great deal in this species of cattle to the West Indies, and carry them on the decks of their vessels, they often get carried away, in the first instance, by the sea breaking over the vessel, or else are so long detained by the calm in these latitudes as to die through want of provisions.

On the 25th of December, 1795, (Christmas-day,) we crossed the tropic† of Cancer; and here it was that Old

* I have heard the same remark made on the Western Islands, and on the island which forms Cape Hatteras,—that there exist generally very violent winds blowing out at sea for near one hundred miles round the coast.

† Here we came into the influence of those steady gales which

Neptune, as is usual in such cases, came aboard and demanded a sight of those who had not entered the *sanctum sanctorum* before. We were accordingly all drawn up, and he soon signalized those who had never yet crossed the line; and having exacted his fine, departed. In case of non-compliance we should have been punished agreeably to the manner prescribed in such cases, and which is called shaving; it is this:—the sailors place you on a stick over a large tub of water; and, at a signal given, the stick is knocked from under, and you fall backwards into the tub over your head and ears in water; when you raise your head it is immediately smeared over with pitch and tar, and all the filth they can gather about the ship, and if they can introduce any into your mouth they will be so much the more satisfied and delighted.

December 27th.—About four o'clock this morning, the moon shining very bright, and the weather being very serene and pleasant, to our great joy we discovered land ahead, which we soon after found to be the Island of Barbuda, and by daylight saw Antigua. Barbuda is a flat island, extending about twenty miles in length and twelve in breadth; it contains but few families. We coasted along the leeward side of it, as near as the rocks, which extend a great way out at sea, and are very dangerous to navigators, would permit us; we could observe the cattle on the shore, which, with the green trees and constant verdure with which these islands are perpetually blessed, was a most pleasing sight to us who had been on the wide ocean so long, and had escaped so many dangers.

perpetually blow, with some little variation, from one point of the compass the whole year round; and are well known by sailors under the name of *trade-winds*.

Barbuda lies very low compared with the other West India islands, for they mostly appear to be exceeding high mountains, particularly the Island of Saba, belonging to the Dutch, which appears now at an amazing distance off, in the shape of a cone, and whose summit seems to reach the skies. About twelve o'clock, on our hoisting a signal, a pilot came on board ; and in the afternoon we anchored in St. John's roads, being unable to go into the harbour, owing to a bar which crosses the mouth of it, and which prevents vessels of any great burthen passing it without first unloading. In the evening we went ashore, and having found out a boarding-house, we took our abode there this night.

December 28th.—Never having dreamed that such an unforeseen event should befall us, neither myself nor any of my fellow passengers had brought any letters of introduction or credit to this part of the world, so that we were in a truly unfortunate situation, especially on hearing to-day, that on a review by the ship carpenters appointed to examine the ship, she had been declared to be not *sea-worthy*, and to be totally unfit for the purposes of navigation, by which event we were obliged to look out for another vessel to take us to the continent. However, in a country where benevolence and hospitality are so prevalent, we did not remain long without enjoying their effects ; for the Hon. Edward Byam, Esq., the president of the Island, and the Hon. Thomas Norbury Kerby, Esq., the treasurer, hearing that the ship had put into the port in distress, and that there were several passengers aboard, immediately sent to us, and in the most polite and ingenuous manner offered us their assistance. They took a great deal of trouble to provide us with a comfortable

boarding-house, invited us to their table, and furnished us with every means necessary to make our stay in the island pleasant and agreeable; and I am happy thus to acknowledge their generous conduct and unsolicited assistance.

Antigua (which lies in N. L. $17^{\circ} 30'$, W. L. $62^{\circ} 5'$) is about twenty miles in diameter, and about fifty in circumference; it is, like the rest of the West India islands which I have seen, very hilly and rocky; nevertheless, some parts of it are very fertile. There are very few or no trees upon it but such as are raised for fruit, as oranges, lemons, limes, cocoas, &c., most of the country being laid out in plantations.* In going to English Harbour, during my stay on the island, I passed over several hills of solid rock, without any layer of earth on them; many of them were prodigiously high, and by some convulsion of nature several large pieces of rock had been thrown off into the valley beneath, some of which were as large as a moderate-sized house. The view of the distant islands of Nevis, St. Kitts, Montserrat, and Guadaloupe, and the views of the sea from different parts of this highly romantic country, added to that agreeable variety of hill and dale, with which this island is interspersed, make the scenery very picturesque and enchanting. The roads are very bad, so much so that I was almost afraid to venture myself in

* There is neither river nor spring in the whole island, so that they are obliged to make use of rain water, which they preserve in large stone reservoirs made in the ground, into which all the rain which falls on their houses is conducted by proper spouts; and this, if it stands any length of time, becomes green, and full of living animals. Some make use of wooden butts set up on end.

one of their sulkeys, a conveyance made a good deal like a one-horse chaise in England ; it has a top to it, supported by two iron rods, and leather curtains are made to let down on both sides and behind, in case of rain ; when this is the case, and the person happens to be driving to windward, he lets down the curtains, turns the sulkey round, with its back to the wind, and waits till the squall is over, then, putting up the curtains, again pursues his journey.

St. John's, which is the capital* of the island, is a miserable-looking place, there being to outward appearance scarcely a decent house in it, though many of them are fitted up tolerably well in the inside ; the houses are mostly built of wood, with nothing but a ground floor, which consists of a hall and two or three bedrooms. The hall is the first place you enter, and faces the street, and is generally the only room the inhabitants have to sit in ; it is therefore built large, for the benefit of the air. Glass windows are but little made use of ; the climate being so hot, they are continued open, with shutters affixed to keep out the rain. Their beds are a mattress, stuffed hard, and raised in the middle

* It looks more like a country village running to ruins than the capital of an island. Possibly my just coming from England might heighten the effect which this apparently ruinous place produced on my mind. Mr. Cox takes notice of the different appearance which places and things had, according to the country through which he had antecedently travelled. "On again entering Schaffhausen," says he, "the 18th of July, 1786, I was not so much struck with its neatness as in 1776. The reason is obvious : In my former expedition I emerged from the wilds of Suabia ; on the latter occasion I had just quitted the cultivated parts of Bavaria."—*Travels through Switzerland*, vol. i. p. 4.

(a feather bed would be too warm), over which a single sheet is thrown ; and round the whole is a fine gauze curtain to keep off the mosquitos, which are very troublesome. The town is divided into streets crossing each other at right angles ; but no attention is paid to the building of the houses, being patched up in a slovenly manner, and some of them no better than huts. The streets are in the same condition, none of them being paved or kept in the least order, but great stones and rubbish thrown into them, which renders it very troublesome walking or riding ; in fact, the inhabitants walk very little here, for if they want to go to any place, far or near, they order out their horses. The ladies ride about in sulkeys. There is a tavern near the water-side, kept by one Scotland, which, by the by, appears no better than a country ale-house in England ; it is made use of as a kind of exchange, and in the evening is frequented by many of the inhabitants, who there play in the public room at cards, dice, backgammon, and other games, and sometimes considerable sums of money are lost. There is no playhouse nor assembly-room in the place, though sometimes the inhabitants act a play among themselves, and sometimes there are private dances.

Among the public buildings of this place, there are only two, excepting the church, which deserve attention ; these are the barracks and the court-house. The former is commodiously built at the upper end of the town, on an eminence, and commands a fine view of St. John's and its harbour ; it is of brick, and I suppose would contain five hundred men. The court-house is a stone building, and, for the place, a very elegant edifice, well

fitted up for the purpose, with the different necessary offices. It stands nearly in the middle of the town. Besides these there are the jail, the guard-house, and the fort, but there is nothing in them to merit particular attention.

January 3rd, 1796.—Three of my fellow-passengers and myself proposed going to English Harbour, about twelve miles distant; and accordingly, having hired two sulkeys, we set off about eight o'clock in the morning, and got to English Harbour to breakfast. There are no taverns in this country, except the one at St. John's, so that our visit was made to a gentleman with whom we had formed some slight acquaintance during our stay. In a country where hospitality is so prevalent as it is here, that natural reserve so characteristic of Englishmen soon wears off, and a mutual interchange of sentiments and good offices takes place, which sets aside every idea of intrusion, or of being an unwelcome guest. After breakfast we went to view the harbour, which is one of the finest in the West Indies. It consists of an inlet of the sea between two very high rocks, the passage between which is very narrow and almost perpendicular. Within, it forms a kind of basin, sheltered on every side by high hills, and of such a depth as to allow a seventy-four to be hove down alongside the yard. During the heaviest gales a ship may ride here with perfect safety, the water being as smooth and as tranquil as in a river. The yard is fitted up with every requisite for a place of this kind.

The town of English Harbour (if a town it may be called) consists of about thirty or forty houses, lying scattered about on the side of one of those hills which

form the harbour. There is no prospect from the town itself, being surrounded by a mountainous country ; but from the tops of the hills you have a delightful view of the country and the neighbouring islands. There is a fort on one of these hills, which commands the entrance of the harbour, and which, as well as the fort at St. John's, shows by signals when any vessel appears in the offing, as well as the course she is going, and her bearing from the land. On our return from this place in the evening, we were astonished at the continual noise made by the lizards and other reptiles and insects with which the whole island abounds : it was so loud, that it was with difficulty we could hear each other speak : it had the sound of a number of horse-bells ringing at the same time. The lizard is a beautiful little animal, about four or five inches long in the body, with a tail about three or four inches ; some of them are beautifully spotted with variegated colours, generally green and gold : they frequent the leaves of the sugar-cane very much. I have seen sometimes three or four on one leaf basking in the sun. Their motion when disturbed is amazingly quick, almost too much so for the eye.

We were attended on our journey to English Harbour by two negroes, whom the owner of the sulkeys had sent to take care of the horses on our arrival there. I could not, for my soul, help pitying the poor creatures, who kept up a constant running on the side of us the whole way. This I had seen practised before, during my residence on the island, as scarcely any person goes to a place where he expects to stop without his slave to take care of the horse ; and this slave must not ride, but run behind, and keep up as well as he can : sometimes he may be in-

dulged by his master's suffering him to lay hold of the horse's tail. In this manner I have several times seen negroes following their master, not unusually with the whip in their hand to save him the trouble of carrying it. I have often thought, when I have been witness to this ludicrous scene, that the master deserved the whip much more than the poor beast.

With respect to the negroes, though they are treated in this island with more lenity than in any other of the West Indies, yet I had too frequent opportunities of beholding the unhappy and inhuman consequences of such an abominable traffic as the slave-trade. When I went to the plantations to see the process of making the sugar, I beheld in different parts negroes standing with their whips, which every now and then they would exercise on the backs of those who, perhaps but for the moment, neglected to proceed in their various employments: some to bring the cane stalks from the field to the mill; some to take away the stalks which had been pressed; and others to feed the fire which kept the cauldrons boiling in which the expressed juice of the cane was placed. I could not but commiserate their unhappy situation: unhappy, perhaps, I should not say, in the strictly logical sense of the word; because, as happiness is a relative term, they may, no doubt, if they can reconcile themselves to their unfortunate state, enjoy as great a share of that invaluable blessing, as one born under more favourable circumstances. Why, then, disturb them? Perhaps, in *such* circumstances, we ought not; but as it requires some time before they can be brought to this reconciliation, and as every man must undergo the most severe and afflicting tortures both of body and mind, in

being deprived of family and friends, torn from his native country, and thrown in chains into the dark hold of a prison ship, deprived of every mean * which may tend to make the rugged path of his pilgrimage in this world the more smooth or comfortable, at once cut off from every hope of escape from a horde of Christian barbarians : I say, the struggles he must encounter during this dark period of misery and oppression, are such as no man, nor nation of men, has a right to inflict on another.

With respect to their being by *nature* a more depraved and degenerate race of men than the whites, it is too unphilosophical as well as absurd to be insisted upon. What is attributed to *nature*, arises from their mode of being brought up; and had they the same advantages of education, they would equal the whites in the improvement of their mental faculties. That they are idle, stupid, and depraved under the present system of things, I do not much wonder. Toiling the whole day in the service of their master, wearied at night with the daily routine of labour, and not reaping any benefit from exertions, which, had they that stimulus, they might be prompted to perform, they are of course idle. Not having the advantages of an education, insulted and

* Among the very few corrections I have made, I should have included the substitution of *means* for *mean* : but this particular word has a charter. . Mr. Baily, at that time at least, was under the erroneous impression that the last letter in *means* is the plural *s*. In the letter to Noah Webster, mentioned in page 4, one of the errors attributed is the use of the supposed plural, when the sense was singular. As I should not be justified in allowing any curious biographer, who might consult the New York Gazette, to impute to Mr. Baily the accusation of a practice in which he himself indulged, I have let the word stand.—ED.

beaten by a merciless and unfeeling animal in the shape of a man, they become unconscious of their own dignity in the scale of created beings ; the use of those mental faculties, given them by a beneficent Creator, becomes perverted ; and they are branded by those very persons, through whose conduct the effect is accomplished, with the epithet of a stupid and depraved race of men. Yet under all these disadvantages, I have met with many of them who have been active, industrious, and of a good moral character ; and, what is still more remarkable, have had, for people in their situation, very refined and exalted ideas of liberty. I do not mean the late Jacobinical system of liberty, where any adventurer, if he find another with property, claims the liberty of going his halves, or, what would be more consonant to his wishes, of seizing the whole ; but that system which has equal rights and the protection of life and property for its foundation.

Believe me, that, however much interested men may defend this horrid traffic, and with whatever sophistry they may endeavour to justify it, still there are points which must strike home to the feelings of every one, and tell him that such a perversion of the noblest faculties of man, such an unnatural exercise of an usurped power, and the practice of such a system of tyrannical oppression, is indefensible, both upon the common principles of natural justice, and of divine instruction.

Provisions, during the time we were at Antigua, were very dear, owing in a great measure to the uncertainty of supplies, and the greater consumption during a state of war. Fresh beef, 15d. per lb. ; salt ditto, 72s. per barrel ; mutton, 10d. per lb. ; bread, 4½d. ; pilot bread,

54s. per barrel ; *maur*, 67s. 6d. ditto ; Irish butter, 63s. per firkin ; old rum, 4s. 6d. to 5s. per gallon ; rum, by the hhd., 3s. to 3s. 4d. per gallon ; fowls, 22s. per doz. ; coffee, 15d. per lb. ; brown sugar, 12d. and 13d. per lb. (an astonishing price for a sugar country) ; a roasting pig, 4s. 6d. ; oranges, 12d. per hundred ; limes, 6d. per hundred ; cocoa nuts, 3d. each, and pine apples, 2d. These are all sterling* prices. The price of a labourer, by the single day, half a dollar ; for the week, 1 dollar, and 2s. for his† board. Boarding and lodging, with a good table of three different dishes every day, to be had for 2 dollars per day, fruit and liquors included. The inhabitants of this island live very much upon fish, being very fine, and in great abundance. The money which passes in this island is an assemblage of all the coins on the face of the world : any gold coin will pass here for its own weight ; but, as to silver coin, no other passes but the Spanish dollar and its smaller parts. The dollar is reckoned at 8s. 3d. ; and so scarce is silver, that they exact a quarter of a dollar for changing a Johannes, a piece of gold worth eight dollars.

January 21st, 1796.—Finding that the *Jay* has been condemned by a Court of Vice-Admiralty, as unfit for the sea, and that she was to be sold for the benefit of the underwriters, I engaged this day with Capt. Woodberry, of the schooner *Friendship*, bound to Norfolk, in Virginia, and who was ready to sail the first fair wind. Accordingly, putting my trunks aboard, I prepared to take leave

* It is to be observed, that all the prices mentioned in this book are reduced to sterling money.

† The hire of a sulkey for the day, 6 dollars ; for a single horse, 3 dollars.

of this delightful island, where I had received so many marks of generous and hospitable treatment. Whilst I remained on the island there were three more vessels driven into the port in distress, in endeavouring to make the coast of America, and which had been driven off by the same gale of wind we were. I am also informed, that there have arrived several at the other islands, so that its effects must have been dreadful. I was told by a very respectable merchant here, that it is no uncommon thing at this season of the year to be driven off the coast, as the north-west winds prevail so very much ; and he expressed his surprise, that persons who undertake the voyage at this time of the year do not furnish themselves with letters of credit to some one in the islands, in case of such an accident, as it was seldom they brought money out with them : I told him, it was for want of the fact being more generally known.

. You ask me, what were the most remarkable occurrences or curiosities I met with during my voyage. The first and most obvious is the luminousness of the sea, which is so often remarked, and yet so unsatisfactorily accounted for. The first time I observed it was the second or third night after being out at sea, and then I saw it to very great advantage. It appeared at first sight as if the bottom of the ship were on fire ; and the sparks and luminous smoke rising on each side to the surface of the water. I do not know that I can describe its general appearance better than in the words of Father Bourzes, in his* voyage to the Indies.† You must observe that it does not always

* Probably alluding to a paper by Bourzes on the luminosity of the sea, published in the *Phil. Trans.* for 1713, or thereabouts.—ED.

† Some of them were like points of light, others such as stars



make this grand spectacle ; in fact, very seldom,—not more than a few sparks, and a luminous appearance of the foam of the sea round the ship's sides. On what particular properties or circumstances the alteration of this phenomenon depends, or what is the real cause of the phenomenon itself, remains to be determined. Mr. Canton's opinion, that it arises from the phosphoric property of dead fish, is the most probable. That it does not depend on any known laws of electricity I am well convinced in my own mind. What an immense quantity of fishes must have putrified since the creation ! May not the admixture of the phosphoric particles of such fish with the body of water in the ocean, conduce to this phenomenon ? It is observed that it does not take place unless the water be put in motion ; and when this is the case, the appearance will take place (though different in degree, according to some unknown laws) at any time. The course of fishes may be marked out by the luminous track they leave behind, and if you take up a bucket of water from the sea, and dash it on the deck, it disperses into little sparks, and assumes a general luminous appearance. Even the agitation of the waves by the wind is sufficient to produce the effect, but in a weaker degree, having then the appearance of an aurora borealis on the water. May not some parts of the sea be more fully impregnated with these phosphoric particles than others,

appear to the naked eye ; some of them were like globes of a line or two in diameter, and others as big as one's head. Sometimes they formed themselves into squares of three or four inches long and one or two broad. Sometimes all these figures were visible at the same time ; and sometimes there were what he calls *vortices* of light.

which may account for the difference of degree which is observed to take place in this phenomenon at different times? However, these are only loose hints thrown out: *you* will be better able to judge than I where the truth lies.

The flying-fish, of which you wished a description, is a genus *exocetus*, belonging to the order of *abdominales*: it is about the size of a small herring; its head is scaly, and has no teeth; its body is whitish, and the pectoral fins (the means of its flight) are very large, which, when it is pursued, it spreads out, and by that means raises itself from the water and flies to a considerable distance, till the fins become dry, and then it falls down again into the water; or, sometimes flying against the sails, it falls down on the deck of the ship. They are met with in large quantities in warm climates; they seldom fly unless pursued by their devourers, and then they are often caught by the gulls and other sea-birds, or else they drop down again into the jaws of their pursuer, who keeps pace below with their aerial flight above. They generally fly in shoals together; and I have often commiserated their unhappy lot when I have observed them flying from instant death, and, unable to sustain themselves, just dipping their fins in the ocean, and renewing their flight; and this for several times successively, till at last, overcome with fatigue, they have sunk to rise no more.

I was surprised, on leaving the coast of England, to find the colour of the sea change from that green hue with which it is always represented, and assume a dark blue colour, though still perfectly transparent when taken up in a glass. Its re-assuming the green hue indicates approaching land.

I sailed from Antigua on the 24th of *January*, 1796. We came out of the harbour by sunrise ; it was most serenely pleasant ; the sun was just peeping above the horizon, and hastening to bestow his favour on an ungrateful world : the atmosphere was clear and bright, and, what was more desirable to us as sailors, the wind most charmingly propitious. My pen fails me when I attempt to describe to you our most delightful voyage along the coast of these romantic islands ;—the scenery of the country so highly picturesque,—blessed with so perpetual a verdure ; and all united, raised in me so great an admiration of these stupendous and sportive works of nature, that I could not but regret when they sunk below the horizon from my sight.

After a most pleasant passage of three weeks, I arrived at Norfolk, in Virginia, on the 14th of *February* ; and now being on the *holy ground*, you will naturally expect a description of the country, the situation and trade of its towns, and remarks on every particular I may think worthy of observation. This much I shall do (if you will give me a patient hearing) in as unbiassed and unprejudiced a manner as I am able ; embellishments I shall not so much seek after as a plain narration of facts ; and to this end you must travel with me in the same order I travel myself in this country. First, then, let me begin with Norfolk. On our landing at this place, we directed our steps, by the pilot's advice, to the Eagle Tavern, kept by —— Street, who is also the Major* of the

* This may perhaps surprise you, but it is no uncommon thing in this country for a citizen to be in a military employment. The fact is, they are all soldiers, which prevents the necessity of keeping up a standing army in time of peace.

fort on the river. On inquiring whether we could be accommodated with beds there, the landlord, without rising from his seat, answered with a seeming kind of indifference that "he *guessed** we could." Having satisfied ourselves so far, we requested our trunks to be taken into the rooms intended for us; and this, after some difficulty, we got accomplished. Our rooms agreed with the spirit and disposition of our *host*,—none of those ornamental appendages, or luxurious downy beds, so unbecoming the character of those who call themselves republicans; but everything corresponding to the habits of those who pretend to look with a degree of contempt on the degeneracy of a luxurious age. Four beds in a room crowded pretty close together; these beds laid on a kind of frame without any curtains, and the room itself without any ornament, save the bare white wall, indicated, without any other assurance, my removal into a strange country. It was about the middle of the day when we arrived here; and we were soon ushered in to dinner, when I saw about forty people (consisting of boarders† in the house, and inhabitants‡ of the town) sitting down to a long table covered with a profusion of every necessary, in a plain but plentiful way. During meals a general conversation is commenced, which is

* A common mode of expression among the Yankees.

† Persons who put up at any of the taverns in America, when they stop two or three days, pay the same per day, whether they eat anything in the house or not; hence the general term "boarders."

‡ It is very common for those people in the large towns of America who do not keep house to board at the taverns; and they, together with whatever company may be in the house, all sit down at one table.

continued without reserve ; and in this manner, two strangers, who had never seen one another before, will become as intimate as if they had known each other for years. After dinner the whole company rise and depart to their different engagements ; and it is seldom or never that you see them sit drinking after the cloth is removed. This, to be sure, is an exemplary practice ; but still, as the sum of human perfection is never complete in one man, or set of men, they have other foibles and vices which counterbalance these good qualities, of which, that passion for gaming, so characteristic of this state in particular (Virginia), is the most predominant. Thus, what time is so laudably saved from the bottle, is thrown away* at the billiard-table, a cock-fight, or at cards. I believe there are near a dozen of the former in this little place, which are crowded during the whole of the afternoon, and till late at night. To these (in this land of equality) any person is admitted, and you sometimes see there a collection of curious characters, some of them not of the most respectable cast ; but still, *when it comes to their turn*, they *will* have their game, notwithstanding there may be some of the first people in the country waiting to play.

The town of Norfolk is a poor-looking place. It is situated on the river Elizabeth, and on the opposite side is the town of Portsmouth, about the same size as Norfolk. Here are still the ruins of those houses to be seen which were burnt during the contest with Lord Dunmore at the commencement of the last war. The spirit of improvement has not extended so far as to have them

* This, however, will apply only to the *southern* states.

rebuilt ; which makes it appear like a town* running to ruins. It has not one public building to set it off. There is not much foreign trade carried on from this place, except to the West Indies. Their vessels consist chiefly of the smaller sort, as sloops and schooners. I do not remember seeing a single *ship* whilst I was there, except one which had put in in distress. The New-England men, who are a most industrious race of people, trade a great deal to this place ; they bring them turnery ware, upholstery, home-made linens and cloths, cheese, butter, and, in fact, any thing for which they can get a market. These they expose for sale on the decks of their vessels, where they keep a kind of shop, and where you may purchase ever so small a quantity. The country about Norfolk is flat, and of a sandy soil, which makes it unpleasant to travel by land in the summer season. The price of provisions at this place is considerably advanced since Mr. Cooper's book was published. This I do not mention as any disparagement of that work, but to show you how great a difference there actually is between the present price† of things and when he wrote. The present price of the following articles is (in sterling money) as under : —Indian corn, 4s. 6d. per bushel ; wheat, 8s. per bushel ; oats, from 2s. to 2s. 3d. per bushel ; flour, 63s. per barrel (a barrel of flour contains 196 lbs.) ; coffee, 13d. per lb. ;

* I observed that most of the houses in this place were furnished with a *conductor*, a plan which cannot be too much recommended ; by which means the lightning, which in this country is at times very prevalent, is disarmed of its destructive powers.

† That the prices mentioned by Mr. Cooper were the actual prices at the time his information was received, I believe may be depended on, as I had his book with me, and made particular inquiries.

butter, 7d. per lb. ; brown sugar, from 7d. to 9d. per lb. ; West India rum, 9s. per gallon ; apple brandy, 5s. 8d. per gallon ; London porter, 13s. 6d. per dozen ; beef, $4\frac{1}{2}$ d. per lb. ; pork, 76s. 6d. per barrel ; turkeys, from 3s. to 9s. each ; salt, 3s. 9d. per bushel ; firewood, from 11s. to 20s. per cord (a cord is a pile of wood 8 feet long and 4 feet high and broad) ; coals, $7\frac{1}{2}$ d. per bushel ; iron, $3\frac{1}{2}$ d. per lb. ; sheep, 9s. each ; eggs, 13d. per dozen. Articles of wearing apparel somewhat dearer than in the northern states of America. For board and lodging whilst I was there, they charged one dollar per day, for which they provide you with breakfast and dinner only : if you eat supper, (which here is very seldom done,) you are charged separately for it. Their breakfasts * consist of beefsteaks, sausages, stewed veal, fried ham, eggs, coffee and tea, and a dish, or rather a *cake*, peculiar to the *southern states*, made out of the meal of Indian corn, and called *hoe-cake*, of which the inhabitants are very fond. Its taste I do not dislike when buttered and eaten with eggs, though to many it is disagreeable : it is simply a mixture of Indian meal and water, and baked on an iron plate over the fire. Having stayed in this place† about a

* This preparation, which seems more fit for a dinner than a breakfast, is common *all over America*.

† Whilst at this place we buried the landlord of our inn. He was a major in the artillery, and, agreeably to the ancient custom, a fieldpiece was discharged over his grave after the coffin had been let down. On firing it, the lid of the coffin flew up, owing to the rarefaction of the air caused by the firing of the gun too close, and which made some of the old women run away, as they either fancied he was come to life again, or that his ghost was rising out of his grave. This circumstance is similar to one I found afterwards recorded in the "Phil. Mag.," vol. ix., p. 361, respecting

week, I proceeded on my way to New York, and for this end took my passage on board a packet bound to Baltimore, in the state of Maryland, intending to go the remaining part of the way by land. These packets (of which there are a number continually plying between Norfolk and Baltimore) are something like the Margate hoys in England. They will accommodate twelve or fifteen people very comfortably, and it is by far the most agreeable way of travelling* in America. Our course lay up the Chesapeak bay, which is from fifteen to twenty miles wide, and about three hundred miles long; it is agreeably interspersed with a number of small islands, which (with the neighbouring shore gradually ascending, and covered with the most stately forests, with every *here and there* a road breaking through this confused mass of plantations) made our voyage most extremely delightful and pleasant. I thought at first sight that the Chesapeak would make a good harbour for shipping, but was informed that it was quite the reverse, being very dangerous in a gale of wind. After a fine run up the bay, we arrived at Baltimore about five o'clock in the evening, *February 25th*, 1796. Here we observed quite a different appearance from that we had remarked at Norfolk. Instead of that apparent decay of trade, that want of emulation, and propensity for gaming, we beheld everywhere that spirit of improvement so congenial to a free and flourishing people, —the streets resounding with the busy hum of men, and

the blowing up of a powder mill, when the doors and windows of an adjoining building were forced open *outwards* by the explosion.

* I paid ten dollars for my passage, for which the captain furnished us very plentifully. If you provide for yourself, you pay only six dollars.

indicating a taste for the refinements* and enjoyments of civilized society. This town,† which, thirty years ago, did not contain thirty houses, is now a large flourishing place, containing near 20,000 inhabitants. It is built in a hollow, and on each side of the town there is a gradual rising, from the top of which there is a most delightful view of the harbour and the adjacent country, including the river Patapsco. The harbour is formed by an inlet of this river ; and the mouth of it, which is about four miles from the town, is but pistol-shot across, where there is a fort, which is sufficient to protect it against any naval force.

The streets of the city are built at right angles, after the manner of Philadelphia,‡ and are all paved with brick and stone, but not lighted with lamps.

There is a very good library established here lately by subscription. There are also two daily newspapers published, which shows at least that the inhabitants encourage a taste for literature and reading amongst themselves.

On a little run of water which empties itself into the harbour, there are several mills erected, the chief of which are appropriated to the making of flour, of which article there is a great quantity exported from this place.

I do not know of any public building in this place,

* There are two excellent taverns in this place, where our accommodations were much better than at Norfolk, though still not to be compared to the *old* country.

† It has lately been made a city, with a mayor and corporation, elected annually by the body of the people. 1798.

‡ This is a plan of which the Americans are very fond, and I think with reason, as it is by far the best way of laying out a city. All the modern-built towns in America are on this principle.

except the court-house, which is very old, and is going to be rebuilt. There is a neat little playhouse, consisting of a pit capable of containing about 300 persons, and two rows of boxes, but no gallery. There is also an assembly-room, where there are assemblies, during the winter season, once a fortnight.

Thus, you see, the *Baltimorians* are not behindhand in the enjoyment of those sweets which tend to enliven the hours that are not taken up in the daily routine of a mercantile employment, or the necessary cares of a family.

The prices of the following articles, whilst I was at Baltimore, were :—Beef, 7d. per lb.; mutton, 5½d. per lb.; fowls, 13d. each; butter, 13d. per lb.; cabbages, 18d. each; hay, 4s. 6d. per 100 lbs.; peaches (during the summer season,) 13d. per dozen.

The following articles were sold at Vendue,* a mode of sale not uncommon in America; and in this town, by no means disreputable, as there are but two Vendue masters licensed to act in the place; which keeps the profession out of improper hands :—Best Cogniac brandy (as fine as any I ever tasted), 8s. 6d. per gallon; common brandy, from 5s. to 7s. per gallon; Antigua rum, 3^d proof, 6s. 8d. per gallon; sherry wine, 4s. 6d. per gallon; Teneriffe wine, 4s. per gallon; claret, 19s. to 22s. per dozen; coffee, 2s. per lb.; cotton, entitled to drawback, 19d. per lb.; brown sugar, 63s. per cwt.; clayed sugar, 73s. per hhd.; common bohea tea, 12½d. per lb.; green ditto, 5s. 6d. per lb.; mustard, 5s. 10d. per doz.

* The same as our sales by auction; and a practice which is very much abused in many of the large towns on that continent.

lbs. ; ginger, 11d. per lb. The above were sold in large quantities.

There being no turnpikes in America, the roads are, of course, very bad in winter, though excellent in summer. I waited at Baltimore near a week before I could proceed on my journey, the roads being rendered impassable. There is, at present, but one turnpike-road on the continent, which is between Lancaster and Philadelphia, a distance of sixty-six miles, and is a masterpiece of its kind ; it is paved with stone the whole way, and overlaid with gravel, so that it is never obstructed during the most severe season. This practice is going to be adopted in other parts of that public-spirited* state, though none of the other states have yet come into the measure.

From Baltimore to Philadelphia are ninety-eight miles ; between which places there is no want of conveyance, as there are three or four stages run daily. In one of these I placed myself on the morning of *March 3rd*, 1796. A description of them perhaps would be amusing. The body of the carriage is closed in, about breast high ; from the sides of which are raised six or eight small perpendicular posts, which support a covering—so that it is in fact a kind of open coach. From the top are suspended leather curtains, which may be either drawn up in fine weather, or let down in rainy or cold weather ; and which button at the bottom. The inside is fitted up with four seats, placed one before the other ; so that the whole of the passengers face the horses ; each seat will contain three passengers ; and the driver sits on

* Pennsylvania.

the foremost, under the same cover with the rest of the company. The whole is suspended on springs ; and the way to get into it is *in front*, as if you were getting into a covered cart. This mode of travelling, and which is the only one used in America, is very pleasant, as you enjoy the country much more agreeably than when imprisoned in a close coach, inhaling and exhaling the same air a thousand times over, like a cow chewing the cud ; but then it is not quite so desirable in disagreeable* weather.

We had not proceeded far on our journey before we began to encounter some of those inconveniences to which every person who travels in this country *in winter time* is exposed. The roads, which in general were very bad, would in some places be impassable, so that we were obliged to get out and walk a considerable distance, and sometimes to "put our shoulders to the wheel ;" and this in the most unpleasant weather, as well as in the midst of mire and dirt. However, we did manage to get twelve miles to breakfast ; and after that, to a little place called Bush, about thirteen miles farther, to dinner ; and about nine o'clock at night we came to *Havre de Grace*, about twelve miles further, to supper ; having walked nearly half the way up to our ankles in mud, in a most inclement season. Havre de Grace is a pretty little place, most delightfully situated on the banks of the Susquehannah river, which at this place is about a quarter of a mile

* "In these stages," as Brissot observes, "you meet with men of all professions. The member of congress is placed by the side of the shoemaker who elected him ; they fraternise together, and converse with familiarity. You see no person here take upon him those important airs which you too often meet with in England."

broad ; it is about a couple of miles above the mouth of the river, where it empties into the Chesapeake bay ; a fine view of which you have from the town. An excellent tavern is kept here by Mr. Barney (brother to the Commodore), and which is frequented by parties in the shooting season, for the sake of the wild fowl with which the Susquehannah so plentifully abounds ; the *canvass-back*, a most delicious bird, frequents this river, and is found nowhere else in America. Next morning we got ferried across the river, and, breakfasting at the tavern on the other side, proceeded on our journey, encountering the same difficulties we had done the preceding day. About three miles from Barney's is a little place, called Principio, situated in a highly romantic country, where there is a large foundry for cannon and works for boring them, situated in a valley surrounded by a heap of rocks ; the wheels of the works are turned by a stream of water running over some of these precipices. About three miles from this is another delightful little place, called Charleston ; I mean, with respect to its *situation* ; as to the town itself, it does not seem to improve at all, at which I very much wonder, as it is most advantageously situated at the head of the Chesapeake, of which and the country adjoining it commands a full and most charming view. We got about nine miles farther, to a town called Elkton, to dinner. This place has nothing in it to attract the attention of travellers. I shall therefore pass it by, to inform you that we intended getting to Newport, about eighteen miles, to sleep. It was four o'clock before we started ; and we had not proceeded far on these miserable roads, ere night overtook us ; and, as the fates would have it, our unlucky coachman drove us into a

miry bog ; and, in spite of all our endeavours, we could not get the coach out again ; we were therefore obliged to *leave it there, with the whole of the baggage, all night* ; and were driven to the necessity of seeking our way in the dark to the nearest house, which was about a mile and a half off ; there, getting ourselves cleaned, and a good supper, we went to bed. Next morning we found every thing just as we left it ; and, getting another coach, we proceeded on our journey, and, dining at Chester, got to Philadelphia about nine o'clock in the evening, completely tired of our ride, having been three days and three nights on the road.

I would not have been thus particular, but I wished to give you a specimen of the American mode of travelling, though you will understand that these difficulties are to be met with only at that season of the year when the frost breaks up, and the roads get sadly out of order ; for in summer time nothing can be more agreeable, expeditious, and pleasant. The fare from Baltimore to Philadelphia is 6 dollars, or 27s., and the customary charges on the road are $\frac{1}{2}$ dollar for breakfast, 1 dollar for dinner, wine not included, $\frac{1}{2}$ dollar for supper, and $\frac{1}{4}$ dollar for beds. These are their general prices, and they charge the same whatever they provide for you. By this, you will observe that travelling in these settled parts of the country is about as expensive as in England.

The country between Baltimore and Philadelphia is of a *clayey* nature, mixed with a kind of gravel ; yet still, in the hands of a skilful farmer, capable of yielding good produce. The land on each side the road, and back into the country, was pretty well cultivated, and (though winter) bore marks of industry and economy. Hedges

are not frequent ; but instead of them they place split logs angular-wise on each other, making what they call a "worm fence," and which is raised about five feet high. This looks very slovenly, and, together with the stumps of trees remaining in all the new-cleared plantations, is a great *disight* to the scenery of the country.

To give you a description of Philadelphia, which has been so often and so fully described, would be unnecessary. That perfect regularity in which it is built, is said not to be approved of by some ; but it is what I most admire ; indeed, it accords so much with the ideas of the Americans in general, that it is a practice which is almost universally adopted in laying out their new towns, and in improving their old ones. The Philadelphians are remarked by foreigners for being inhospitable and reserved. This, on a first acquaintance with them, appears true ; but it is a prejudice from first sight only, as their society improves on a further acquaintance with them. Opinions will be formed of the characters of men, according to the different circles which travellers fall into during their residence in a country ; and their descriptions will receive a taint from those with whom they have most conversed. This is an unjust mode of appreciating the merits of a whole body of people ; and yet it is a difficult matter to divest ourselves entirely of this association of ideas. Besides, there is another point in which travellers fail in giving a true and just delineation of the *real* manners of a people *amongst themselves*. In every country a stranger is entitled to hospitality and good services. And it is in very few places, but the traveller meets with respect and attention. This respect and attention they even take a pride of showing you as

strangers ; but when you come to live amongst them, and your pretensions happen to clash with theirs, then "they become as other men are ;" then those secret springs of action, over which they had thrown a veil of seeming benevolence and hospitality, become open to our view, and discover the common failings of human nature.

The Library, of which you have heard much said, is a handsome brick building, and was founded by the great American philosopher, Dr. Franklin, under the protection of the state : his statue is over the door. In the inside it is divided into two large apartments, which are well stored with books of all descriptions, chiefly, or I may say wholly, *printed* books. Here any citizen may take away what book he pleases ; but if he be not a subscriber, he leaves *double* the value of it till its return, and then pays a small sum for the use of it. Strangers may go in and read without any fee or reward.

The Museum I cannot say much of, it is yet in its infancy ; it belongs to Mr. Peale, who is forming a collection, which, at some future period, may be an honour to the country. Here are several churches, most of which are of the episcopalian denomination. The Quakers are not so numerous as I expected to find them ; they do not dress in that formal style which they do in the old country, except the very rigid ones. The city is under an excellent police, and is one of the cleanest places I ever was in. The introduction of the yellow fever has taught them this useful lesson. Here is a market every day, but on Wednesdays and Saturdays it is most frequented ; and immediately after the market is over, scavengers are employed to sweep the streets and take away all the filth, so that in five minutes after-

wards you would not suppose there had been a market held there for months. This city is the *present** metropolis of the United States, and in fact is worthy of it : it contains by computation about 70,000 inhabitants. It is situated in a flat champaign country, between the Schuylkill and the Delaware rivers, the former of which is a pleasant stream running along the back of the city, on the banks of which there are an innumerable number of little country seats. It is thought by some that this flat country tends to generate the yellow fever ; it may tend to increase its effects when introduced, I allow ; but it must have some other origin than this, or how does it originate in the other seaport towns of America, whose situation is quite different ? Besides, there are other places on the continent more likely to give rise to it than this, and where the disease is never known ; but these are back from the shore. The most probable opinion is, that the disorder is imported.

There is a very excellent playhouse in this place, the stage of which is as large as that of Covent-garden. When first it was intended to be built (which was some ten years since) there was great opposition to it, particularly by the Quakers, who set their face against every thing of the kind ; and when it was first opened, there were sad disturbances and riots among the populace for several nights ; they attacked and insulted almost every person who went in. You will naturally ask the cause of this. It arose from too puritanical a spirit among the people. Congress during the war solemnly declared that—I forget the pre-

* The seat of government is *now* removed to Washington.—
(*Subsequent note of Author.*)

cise words of the declaration, but it amounted to a prohibition of all such pastimes during the war—and a few unenlightened fanatics, thinking the rod was not fully removed, were afraid they should incur the wrath of Heaven again by such *impious* practices; and they still believe that the yellow fever (owing to its happening about the same time) was a scourge for such a *heinous* crime.

They have an assembly-room, and an amphitheatre, which are both open during the proper season; concerts, likewise, are not unfrequent; so that there are the same amusements to be met with, and in an equal degree, to what there are in the large towns in Great Britain. The state of society too is much the same.

Prices of provisions, &c., are :—beef, $7\frac{1}{2}$ d. per lb.; mutton, $3\frac{3}{4}$ d. per lb.; pork, 5d. per lb.; flour, 31s. per cwt.;* butter, 1s. 6d. per lb.; butter in kegs, 9d. per lb.; cheese, 6d. per lb.; English do., 2s. 2d.; Virginia coal, 1s. 10d. per bushel; Lisbon salt, 4s. 3d. per bushel; Irish mess beef, 72s. per barrel; pilot bread, 50s. per barrel; coffee, 1s. 2d. per lb.; superfine† flour, 63s. per barrel; Indian meal, 22s. 6d. per barrel; wheat, 10s. 6d.† per bushel; rye, 5s. 4d. per bushel; barley, 5s. 4d. per bushel; oats, 2s. 3d. per bushel; Indian corn, 3s. 10d. per bushel; rice, 31s. 6d. per cwt.; hemp, £20 per ton; Jamaica rum, 8s. 2d. per gallon; Windward Island do., 6s. 9d. per gallon; New England, 4s. 6d. per gallon; Muscovado sugar, 40s. per cwt.; tar, 15s. per barrel; Madeira, 9s. per

* The cwt. in America is only 100 lbs.

† This was at a time when great quantities were shipped to England, but it is now much lower.

gallon ; Lisbon, 5s. per gallon ; Sherry, 5s. per gallon ; hay, 90s. per ton ; saltpetre, 6s. per lb. Boarding at Thompson's tavern, 6s. per day, exclusive of wine.

I left Philadelphia with regret on the 14th *March*. We passed through Bristol, which is about twenty miles from Philadelphia, and seated on the banks of the Delaware ; it is but a small place, but very pleasantly situated, as the towns in America are, which are on the borders of the rivers.

From Bristol to Trenton, which is situated on the opposite side of the river, higher up the stream, is ten miles ; the road runs along the banks of the Delaware the whole way, which forms a most enchanting ride ; the banks on each side, rising gradually, and highly cultivated (with every here and there a little island in the river), add to the picturesque scenery of the whole. Trenton is situated near the falls of the Delaware, and is about thirty miles by land from Philadelphia. These do not deserve the name of *falls*, being nothing more than a ledge of rocks reaching across the river, and obstructing the navigation for large vessels. This is the extent of the *tide* of the Delaware. The town stands on a rising ground, and through the middle of it (or rather on one side of it) runs a small stream, over which there is a bridge, and which turns a grist-mill. It was here that General Washington fell on the Hessians on the evening of Christmas-day, 1776.*

* He crossed the river, in a most tempestuous night, above the falls, whilst two detachments crossed below ; and falling on the Hessians, lulled into a belief of security, and heated by the fumes of a Christmas evening, took them by surprise, and made near a thousand of them prisoners, in spite of the gallant opposition of

From Trenton to New York our course lay through the Jerseys, the seat of contention and bloodshed during the long period of the late fratriciduous war. *Here* was a kind of predatory warfare carried on by the British for some time, till the Americans put a stop to it by driving them out, and confining them to New * York. The country about here is more sandy than on the other side of the Delaware; nevertheless, there are some large tracts of excellent land. From Trenton to Princeton is twelve miles. Here there is a handsome stone college, founded in the year 1738. Its philosophical apparatus and library were destroyed during the war by the British, who, like Goths† and Vandals, spread destruction wherever they went. It was this place that General Washington attacked, when he escaped by so artful a manœuvre from Trenton; by causing fires to be made between the English and American army, which lay opposite to each other on each side the brook, and leaving a number of hats stuck upon poles, which at a distance appeared like

Colonel Rhalle. This turned the tide of American affairs, which were then at their lowest ebb, and laid the foundation for that success, by which a free people *preserved* their liberty, and *gained* their independence.

* This state suffered, for its wealth and population, more than any other in the union, owing to its being continually harassed by both parties.

† The conduct of the Goths and Vandals is generally held up as an example of the bad effects and unbounded devastation of an unprincipled banditti; but we shall find that in most countries, when a state has been overrun by an invading enemy, the conquering soldiers (who are generally made up of the dregs of society) have paid little attention to literary men or literary property; and in modern times we have too many instances of both falling sacrifices to their unprincipled habits and inveterate fury.

men's heads; thereby preventing them from seeing the main body of the army, and lulling them into a security that the sentinels were on the outposts. On his route he met Lieut.-Colonel Mawhood, who was about midway between Princeton and Trenton, on his march to reinforce Lord Cornwallis; and his attack on this party was the first notice the English had of his departure. In this action General Mercer was killed, but Washington was successful in taking possession of Princeton, and he thereby overran the Jerseys.

From Princeton we came through Brunswick, Woodbridge, Elizabeth-town, and Newark. The former is a handsome town situated on the banks of the Rariton, which is navigable for large vessels close to the town. The latter is a pleasant little village near, though not on the banks of, the Pasaik. It is through this place (which is about nine miles from New York) that so much company passes to see the famous falls of the Pasaik. I took a ride there some short time since to see them. There is a little town situated near them, called Patterson, and which is about seven or eight miles from Newark, the road to which runs along the banks of the Pasaik nearly the whole way, and forms one of the most delightful rides I ever* experienced. Words will naturally fail to impress on the imagination a clear idea of the scenery of a country or its several beauties; neither can a proper idea of them be formed, unless we can present a "perfect whole" at once to the view. The

* A beautiful stream,—banks gradually rising on each side, adorned with innumerable plantations and neat cottages; the distant country covered with tall forests: in short, the whole presenting at once to the eye a most enchanting scene.

pencil may supply what words are unable to express ; but still that does not equal nature. I therefore doubt but you must remain ignorant of that perfect contour (which serves to render this short journey so highly delightful) till you have an opportunity of seeing it *in propria persona*.

The falls are about a quarter of a mile from the town, and their noise may be heard about a mile off. They are occasioned by a fissure in a rock, over which the river formerly ran, as there is every appearance of the old bed. On one side of this rock is a hollow, which leads into a valley below. This fissure, which is shaped like a wedge, lets the water pass down between the rocks into the hollow below, and from thence into the valley. It is evidently the effect of some violent convulsion of nature. The river is about as large as the Kennett, and in its passage over the rocks, raises such a spray, that you are almost wet through if you stop long near it. This spray, too, which has the appearance of steam rising when the sun shines on it, refracts the rays of light in such a manner, as to cause the appearance of a rainbow, the same as is observed at the falls of Niagara. The height is thirty-five feet ; and, what is very remarkable, we could much more plainly hear each other speak when near the falls, and when their noise seemed loudest, than when at a short * distance off.

At Patterson they have attempted to establish a manufactory, the machinery to carry on which was intended to be turned by water ; and for that purpose large sums of money have been expended in endeavouring to work

* The same, I am informed, is observed at Niagara. I believe also, that the experiment may be tried in any *mill*.

through the rock, in order to bring the water to act on the wheels ; but at present it has not succeeded, and for some time back the proceeding has been discontinued.

From Newark to New York is about nine miles, and the greatest part of the road is over a large swamp, which lies between and on each side of the Pasaik and Hackinsac rivers. Over this swamp they have made a causeway, which trembles the whole way as you go over it,* and shows how far the genius and industry of man will triumph over natural impediments.

To New York, which is ninety-six miles from Philadelphia, we were a day and a half in coming. The roads were not so bad as when we came from Baltimore. Our fare was 6 dollars, and the charges on the road the same as between Baltimore and Philadelphia :—viz., $\frac{1}{2}$ dollar breakfast, 1 dollar dinner, $\frac{1}{2}$ dollar supper, and ~~1~~ dollar lodging.

Of New York, whence I now date, you will find a tolerably accurate account in Morse. It is situated on an island, the northern part of which is joined to the continent by a bridge, called King's Bridge. There is also a bridge at Haarlem, which is about the middle of the island, on the east side. Without a map it will be impossible to form any correct idea of the country ; but with the help of that, you will be able to form a pretty accurate idea of the relative situations of different places. Opposite to the island on which New York stands, is *Long Island*, and near it lies *Governor's Island*. To the westward of Long Island lies *Staten Island*, where the British first landed ; and between Staten Island and New

* It consists of several layers of large logs laid longitudinally, and parallel to each other, and covered at the top with earth.

York lie two other small islands, which contain a kind of lazaretto.

On the point of land at the junction of the North and East rivers was formerly a battery, now converted into a public walk, planted with a double row of trees along the water side. This is the only public walk the *New Yorkers* can boast of ; of course, it is very much frequented, particularly on a summer's evening ; it may then be compared to Temple Gardens in the City. It commands a fine view of the bay and the different islands in it, as well as the Jersey shore on the opposite side, and a great part of the North or Hudson's river. On Governor's Island is a fort and a corps of artillery, which is the only protection the city has against any hostile *naval* force. In fact, it can never be well defended from an attack by sea, as the narrowest part of the entrance to the harbour (which is between Staten and Long Islands) is two miles wide, which is called "the Narrows," through which, with a fair wind and tide, a ship might sail in defiance of any attempted obstructions from the shore, as was proved by the British in the late war. Various plans have been proposed to defend it from being passed in case of a war, but none has proved effectual. Not far from New York is a place called Hellgate ; it is situated near the entrance of the Sound, and forms part of the communication between that place and the East river. There is a remarkably strong current and whirlpool at this place, which is caused by the tide running rapidly over a bed of rocks which lie across the river, and some of which project above the surface. It is very dangerous navigation here, whilst the tide is ebbing or flowing, and makes a most horrible noise, whence its name ; but at

high water and with a skilful pilot, large vessels may pass over in safety.

With respect to the city of New York, it is an irregularly built place, consisting principally of little narrow streets, though some of those which are newly laid out are broad and handsome, particularly Broadway, extending nearly a mile in length. It does not contain many public buildings, except churches, which are very well built, and with handsome steeples. The governor's house, which is situated near the battery, is a large brick building, with stone columns before the door, but has neither taste nor elegance to set it off. The Federal Hall is the most clumsy uncouth building I ever saw ; it cannot lay claim to any pretensions for taste or style. There are also a poorhouse, a workhouse, and two gaols, which are neat, plain brick buildings, well adapted to the purposes for which they are severally intended.

Columbia College, which is situated near the North river, is a handsome though a plain building ; it was founded by charter, and is conducted by proper professors in the different departments of the classics, as well as the different branches of natural and experimental philosophy.

The inhabitants of New York are very fond of music, dancing, and plays ; an attainment to excellence in the former has been considerably promoted by the frequent musical societies and concerts which are held in the city, many of the inhabitants being very good performers. As to dancing, there are two assembly-rooms in the city, which are pretty well frequented during the winter season ; private balls are likewise not uncommon. They have two theatres, one of which is lately erected, and is

capable of containing a great number of persons ; there is an excellent company of comedians, who perform here in the winter. But the amusement of which they seem most passionately fond is that of sleighing, which is riding on the snow in what *you* call *a sledge*, drawn by two horses. It is astonishing to see how anxiously persons of all ages and both sexes look out for a good fall of snow, that they may enjoy their favourite amusement ; and when the happy time comes, to see how eager they are to engage every sleigh that is to be hired. Parties of twenty or thirty will sometimes go out of town in these vehicles towards evening, about six or eight miles, when, having sent for a fiddler, and danced till they are tired, they will return home again by moonlight, or, perhaps more often, by *daylight*. Whilst the snow is on the ground no other carriages are made use of, either for pleasure or service. The productions of the earth are brought to market in sleighs ; merchandise is draughted about in sleighs ; coaches are laid by, and the ladies and gentlemen mount the *silent* car, and nothing is heard in the streets but the tinkling* of bells.

There is a very good library in New York, established by the legislature of the state, and divided into a certain number of shares, which are transferable, and subject to an annual demand for the purpose of defraying the expenses of the society, and augmenting the number of books. No person but the holder of a share can obtain the loan of a book, though no one is ever denied access to read in the library room.

* The sleighs not making any noise when in motion over the snow, the horses are obliged by law to have little bells fastened around their necks, to warn foot-passengers of their approach.

As to the state of society, you will find more English men and English manners in this place than in any other on the continent, yet divested of that reserve and *haute ton* so prevalent in the old country. There is a society of merchants who meet every Saturday at the Belvidere—a house most pleasantly situated on a hill a little way out of the city, and commanding a fine view of the adjacent country. Here most strangers are invited; and here it is that an unreserved conversation takes place between men from whom (their situations in life being nearly similar, and their several pretensions and interests happening to clash) one would not expect such ingenuousness of disposition, but which is characteristic of an independent mind. The intercourse between private families, and the access to what you call the higher circles, but which in this country are not known as such, are less incumbered with that form and ceremony so much observed with you.

On Long Island, over which is scattered a number of small villages, are many delightfully pleasant rides, which are much frequented in the summer season by different parties from New York, who go over to hunt, shoot, and fish; and some, merely to enjoy the scenery of the country, and a clear and pure atmosphere.

New York is advantageously situated for commerce:—not thirty miles from the *ocean*;—a safe and commodious harbour;—commanding extensive communications into the interior of the country by the mean of the Sound, and the rivers which run into it as well as by the North river, which is navigable for sloops above Albany:—it bids fair to outstrip all her sister states in the advancement of her commercial interests.

From New York to Rhode Island there is a regular communication kept up by means of packets, on the same principle with those between Norfolk and Baltimore ; and which navigate up and down the *Sound*, the same as those do up and down the Chesapeak ; the distance too is nearly the same.

I went in one of them some short time since to Providence, in Rhode Island ; our passage was through Hell-gate, which at the time we passed it (being high water) was quite smooth and placid. It was a fine day when we started, and the appearances of the trees, just budding out, the harbinger of spring, from the neighbouring shores, added to the many little villages with the tall white spire rising from the midst, produced a scene.*

I set off on the 1st of *September*, 1796, to make a tour of the western country,—that land of Paradise, according to the flattering accounts given by Imlay and others. Wishing to go to the new city of Washington, we† took our route through Philadelphia and Baltimore, which I have already described. I shall not trouble you with any further remarks, excepting that as the season was just the reverse of what it was when I passed through this country last, it presented quite a different appearance from what I described to you in my former letters. Besides, there was none of that inconvenience from bad roads, so

* Here should follow an account of my journey to Boston up the Sound, and back again through the New England States : a most beautiful jaunt. But the journal which I made at the time is mislaid.

† I was in company with a gentleman of the name of Heighway, who was going down to the north-western settlement to form a plantation.

terrible to a traveller in the winter. On the contrary, we went on with a rapidity and safety equal to any mode of travelling in England.

From Baltimore to the new city of Washington is forty-five miles, where we arrived on the *5th* of *October* following. The road is well furnished with taverns, which in general are good, at least as good as can be expected in this part of the world. Close to Washington is a handsome town called Georgetown ; in fact, it will form part of the new city ; for, being so near the site intended for it, and being laid out nearly on the same plan, its streets will be only a prolongation of the streets laid out for the city of Washington : so that it will in course of time lose its name of Georgetown, and adopt the general one of Washington. Much in the same manner the small places formerly separated from the metropolis of England have lost their name, and fallen under the general denomination of London.

Georgetown is situated on a hill close to the river Potomak ; it presents a beautiful view from the surrounding country, of which also it commands a fine prospect. It is a seaport town, and some of their vessels are employed in the London trade. There are stages run daily between this place and Baltimore, for which you pay four dollars. There are also stages to and from Alexandria, a handsome and flourishing town situated on the Potomak, lower down the stream, and about eight miles off ; for which you pay a fare of three quarters of a dollar. We put up at the Federal Arms whilst we were there. It is a good inn, but their charges are most extravagantly high.

The Potomak at this place may be about as wide as the Thames at London Bridge. The navigation of the

river is safe ; and it is deep enough for merchantmen above Georgetown.

I presume you know upon what principle the new* city is laid out : the President's House and the Capitol are situated upon two eminences ; and other different rising grounds in the site are fixed on, with an intention of erecting obelisks, statues, &c., to eminent men. These eminences communicate with each other by means of streets proceeding from one to the other, like radii from a centre ; and from the Capitol *a true meridian line* is drawn, which terminates at the point of land made by the junction of the two rivers ; and by this line a street from the Capitol to the Point is laid out, and intended to be called South Capitol Street. This is the groundwork of the plan ; and by this method those natural risings will be made subservient to the elegance and beauty of the city ; and that general mode of laying out a town by means of streets crossing each other at right angles and at certain distances, without any regard to the position of the ground, will be avoided. Our first walk was to the President's House, which is a building of stone about the size of Whitehall. It is nearly completed ; and when fitted up will be a handsome edifice. It commands a fine view of the harbour, and also

* In February, 1798, there remained unsold of the lots in the city of Washington—1,709 building lots in choice squares ; 3,890 feet front on navigable rivers ; 3,428 building lots in other parts.

The first were valued at 358 dollars per lot, equal to 611,822

The second at 15½ ... per foot ... 60,295

The third at 152 ... per lot ... 521,056

1,193,173

Amount already sold ... 278,190

Total ... 1,471,363

of the Capitol, *to which* there is a broad street intended to be built. The Capitol stands upon the highest ground in the city, and commands a still better view of the harbour, as the prospect extends a considerable way down the river. The Capitol, which is also of stone, was in a great state of forwardness ; and it was expected to be finished before the time appointed for the removal of Congress, January, 1800. It is impossible to say what kind of an appearance it will make when it is finished ; but, if I may judge from what was already done, I think I may pronounce it to be a building worthy the taste and enterprise of a free and flourishing people. From the Capitol we walked down to the Point, where there is a place marked out for a battery. The view from here is extremely delightful :—On each side, a fine river, flowing with a gentle current along the base of a hilly and romantic country. In front, these two rivers form a junction extending as far as the eye can reach, and the prospect is terminated only by the distant country. The banks on each side are covered with innumerable plantations, with the distant view of Alexandria and its towering steeples, about six miles below, projecting apparently into the middle of the river. In the rear is the still nearer view of Georgetown, and of the President's House and the Capitol. All tend to render it one of the most delightful and pleasant sites for a town I have ever remarked in the whole of the United States. The private buildings go on but slowly. There are about twenty or thirty houses built near the Point, as well as a few in South Capitol Street, and about a hundred others scattered over in other places : in all I suppose about two hundred : and these constitute the great city of Washington. The truth

is, that not much more than one-half the city is *cleared* : —the rest is *in woods* ; and most of the streets which are laid out are cut through these woods, and have a much more pleasing effect now than I think they will have when they shall be built ; for *now* they appear like broad avenues in a park, bounded on each side by thick woods ; and there being so many of them, and proceeding in so many various directions, they have a certain wild, yet uniform and regular appearance, which they will lose when confined on each side by brick walls.

The canal and the gardens, as well as the bridges, which you see marked down in the plan, are not yet begun ; they are still in the same state of nature that they were before the city was marked out. In fact, were it not for the President's House and the Capitol, you would be ignorant that you were near the spot intended for the metropolis of the United States.

Game is plenty in these parts, and, what perhaps may appear to you remarkable, I saw some boys who were out a shooting, actually kill several brace of partridges in what will be one of the most public streets of the city. I mention this, to give you an idea of the present state of the city ; and I could not help reflecting at the time, what a different appearance it presents now to what there is every probability it will in the course of a few years : when, instead of being (as it is now) uncleared and uncultivated, it will resound with the busy hum of men, and become the emporium of whatever shall be worthy the observation of man.

Building lots in this city sell from six to twenty-five cents (a cent is a halfpenny) per square foot, according to their situations, &c. The Federal Arms, where we

put up, is the best, though the dearest, tavern in Georgetown. It cost us, whilst we were there, for dinner, supper, breakfast, luncheon, and horses, four dollars each. Our horse not being trained to the chaise, we were obliged to sell it, which we did for forty dollars; and, at about half-past one, *October 7th*, we started on our journey over the Allegany mountains to Pittsburgh. About fourteen miles on the road is a pretty little town called Montgomery Court House; it contains some good houses, but the streets are narrow. About seven miles further is a little settlement, formed a few years back by Captain Lingham, called Middlebrook. Captain Lingham has a house on the road, near a mill, which he has erected; and here (following the example of many of his brother officers) he has retired from the toils and bustle of war, to spend his days in the enjoyments of a country life. We arrived here about six o'clock; the sun was just setting, yet there was time to go another stage; but, as we were got into a part of the country where *taverns** were not very frequent, we proposed stopping here this night. Accordingly, putting our horses up at a little tavern, (which, together with four or five more houses, composed the whole of the settlement,) we had a comfortable supper and went to bed. About half-past six the next morning we started from this place, and stopped, about seven miles on the road, at an old woman's of the name of Roberts. This old woman (whose house, I believe, was the only one we saw on the road) acts at times in the capacity of a tavern-keeper: that is, a person travelling that way, and straitened for provisions, would most probably find something there for himself and his

* All the inns and public-houses on the road are called *taverns*.

horse. The old lady was but just up when we called ; her house had more the appearance of a hut than the habitation of an hostess, and when we entered there was scarcely room to turn round. We were loath to stop here ; but there not being any other house near, we were obliged to do it, both for the sake of ourselves and our horses. We soon made her acquainted with our wants, and she, gathering together a few sticks, (for her fire was not yet lighted,) and getting a little meal and some water, mixed us up some cakes, which were soon dressed at the fire, and then all sitting down at the table, and having mixed some tea in a little pot, we enjoyed a very comfortable breakfast. The poor old woman, who was a widow, seemed to live in a deal of distress : the whole of her living was acquired by furnishing accommodation to travellers. When we were sitting over the fire, and partaking of our meal-cakes with this old woman, it brought to mind the story of Elijah and the widow, (1 Kings, chap. xvii.,) particularly where she answers him with, "As the Lord thy God liveth, I have not a cake, but an handful of meal in a barrel, and a little oil in a cruse : and, behold, I am gathering two sticks, that I may go in and dress it for me and my son, that we may eat it, and die," The appositeness of our situations rendered this passage very striking, and made me look upon my hostess in a more favourable point of view than when I first saw her. I gave her something to render her situation more comfortable and happy.

Leaving this lonely habitation, we continued on our journey, and crossing the Sinecocy river, about eleven miles on the road, we reached Fredericktown, about four miles farther, at twelve o'clock. This is a large and

flourishing place, contains a number of good houses, and is a place of great trade, owing to its being the thorough fare to the western country of Pennsylvania and the Ohio. There is a large manufactory of rifle-guns carried on here; but so great is the demand for them, that we could not meet with one in the whole place: they sell in general from 15 to 25 dollars each, according to their style of being mounted. The tavern where we stopped was kept by Mrs. Kemble: it is a tolerably good house. After dinner we left this place, and after going about three or four miles, we arrived at the foot of the Appalachian Mountains. And here let me stop a little to make a few observations on the face of the country we have just passed over. From Georgetown to this place, it almost wholly consists of a sandy, gravelly soil, with difficulty repaying the husbandman for the trouble of tilling it. The face of the country is very uneven, being a constant succession of hill and dale. Little towns or villages are scattered over the country at the distance of seven or eight miles, which communicate with each other by roads which are almost inaccessible during the winter and spring months. Our charges on this part of the road were half a dollar each for breakfast and dinner and supper, without any distinction of fare. If our table were spread with all the profusion of American luxury, such as ham, cold beef, fried chicken, &c. &c., (which are not uncommon for breakfast in this part of the world), or whether we sat down to a dish of tea and hoe-cake, our charge was all the same. The accommodations we met with on the road were pretty well, considering the short time this country has been settled, and the character and disposition of its inhabitants, which are

not those of the most polished nations, but a character and disposition arising from a consciousness of independence, accompanied by a spirit and manner highly characteristic of this consciousness. It is not education alone that forms this character of the Americans: it stands upon a firmer basis than this. The means of subsistence being so easy in the country, and their dependence on each other consequently so trifling, that spirit of servility to those above them so prevalent in European manners, is wholly unknown to them; and they pass their lives without any regard to the smiles or the frowns of men in power.

Nearly the whole of the way from Georgetown to Fredericktown we preserved a distant view of the Allegany Mountains, at whose feet we were now arrived. They presented to us one general bluff appearance, extending as far as our eye could see from the north-east to the south-west. Our approach to them was in a line perpendicular to that of their extension, so that they seemed to bid defiance to our progress. The *Allegany Mountains* is a name given to a range of several ridges of mountains stretching from Vermont to Carolina, of which one ridge alone is properly the Allegany Mountain. These ridges are nearly 170 miles in width; and the middle one, or the Allegany, forms the backbone of the rest. The ridge which first presented itself to our view, is called in Howell's Map the South Mountain. The road (which here began to be very rocky and stony) is carried over the least elevated part of the mountain, and from its summit we beheld that beautiful limestone valley so recommended by Brissot. On our descent from this mountain, we entered on one of the finest tracts of land

in all America. This celebrated valley, which lies between this and the next ridge of mountains, extends from the Susquehannah on the north to Winchester on the south, is richly watered by several navigable streams, and is capable of producing every article which is raised in the neighbouring countries in the greatest abundance. It is inhabited chiefly by Germans and Dutch, who are an industrious race of men and excellent farmers. Their exertions have made this valley (bounded on each side by barren and inhospitable mountains) assume the appearance of a highly cultivated country, abounding in all the conveniences and some of the luxuries of life. Besides a general appearance of comfortable farms scattered over the face of the country, it can boast of several large and populous towns, which keep up a connexion with the cities on the Atlantic, and supply the interior of this mountainous country with the produce of distant nations. It was dark before we descended from this mountain; but we had not proceeded far in the valley when we came to a little place called Boom's-town, where we were glad to rest ourselves and horses after the fatigues of so rough a road. Boom's-town is eight miles from Fredericktown: it has not been settled above three or four years. We met with a very good tavern and excellent accommodations.

From Boom's-town, the next morning (*Sunday, October 9th, 1796*) we passed through Funk's-town, which is another new-settled place; and immediately on leaving this, Hagar's-town presented itself to our view, about two miles off: here we arrived to breakfast. Hagar's-town* is a large flourishing place, and contains some

* Hagar's-town is ten miles from Boom's-town.

good houses. The streets are narrow, and, agreeably to a barbarous custom which they have in laying out new towns in America, the court-house is built in the *middle* of the principal street, which is a great obstruction to the passage, as well as being of an uncouth appearance. This place is situated on a fine plain, and, like Frederick's-town, is a place of great trade, and also a manufactory for rifle-guns, of which we bought two at twenty dollars each. Here is a paper published weekly; and assemblies are held here during the winter. There is also a great deal of horse-racing in the neighbourhood at stated seasons. We put up at the Indian Queen, kept by Ragan: it is a good house and much frequented.

From Hagar's-town we proceeded on to Greencastle, which is a poor little place, but lately settled, and consisting of a few log-houses built along the road. We stopped at one of these houses, which they called the tavern, kept by one Lawrence; it was a poor miserable place. We were obliged to unsaddle our horses, put them into the stable, and feed them ourselves; and then, having got something to eat and refreshed ourselves, we got out of this place as soon as we could. Greencastle is eleven miles from Hagar's-town; and we had to go eleven miles farther that evening to Mr. Lindsay's, whom we had engaged at Baltimore to carry some goods to Pittsburgh in his waggons. His house lay at some distance from the road we were going, so that we struck across the woods to approach it; and, after having missed our way once or twice, we struck on a road which took us down to his house. Here we were hospitably entertained for two days by Mr. Lindsay and his father-in-law, Mr. Andrews, who have a very excellent farm, and

live very comfortably in the truly American style. The place at which he resides is called the *Falling Springs*; for what reason they are called *falling* springs I cannot conceive; they *rise* from under an old tree, and the stream does not proceed three hundred yards before it turns a cyder-mill; and a little farther on turns a grist-mill. These mills belong to Mr. Andrews, as also does a large quantity of the land around; for in this country *all* the farmers are landholders. Mr. and Mrs. Andrews are Irish; and they and their family are all settled in the neighbourhood. Their children are all brought up in industry, and have their time fully employed in performing the different necessary duties of the house and farm. Nevertheless, they appear to live very happy and comfortable.

Tuesday, October 11th, 1796.—About eleven o'clock this morning we set off from Mr. Andrews's, in company with a party of several of the neighbouring farmers who were going to Chambersburgh to vote at an election. Chambersburgh is about three miles from Mr. Andrews's, and is a large and flourishing place, not inferior to Frederick's-town or Hagar's-town; being, like them, on the high road to the western country, it enjoys all the advantages which arise from such a continual body of people as are perpetually emigrating thither. I have seen ten and twenty waggons at a time in one of these towns, on their way to Pittsburgh and other parts of the Ohio, from thence to descend down that river to Kentucky. These waggons are loaded with the clothes and necessaries of a number of poor emigrants, who follow on foot with their wives and families, who are sometimes indulged with a ride when they are tired, or in bad weather. In this manner they

will travel and take up their abode in the woods on the side of the road, like the gypsies in our country, taking their provisions with them, which they dress on the road's side, as occasion requires.

About thirteen miles from Chambersburgh, which we left in the afternoon, is a place called the *Mill*, which is kept by some Dutchmen. We understood it was a tavern, but were disappointed; however, as it was now dark, and no tavern on the road for some distance, we were under the necessity of begging a lodging here, which was granted us at last with the greatest reluctance. Here we had rather an unfavourable specimen of Dutch manners. We were *kindly* directed to take our horses to the stables, and take care of them ourselves, which we accordingly did; and, returning to the house, I was witness to a kind of meal I had never before experienced. First of all, some sour milk was warmed up and placed on the table. This at any other time would probably have made us sick; but having fasted nearly the whole day, and seeing no appearance of anything else likely to succeed it, we devoured it very soon; particularly as the whole family (of which there were seven or eight) partook of it likewise; all of us sitting round *one* large bowl, and dipping our spoons in one after another. When this was finished a dish of stewed pork was served up, accompanied with some hot pickled cabbage, called in this part of the country "warm slaw." This was devoured in the same hoggish manner, every one trying to help himself first, and two or three eating off the same plate, and all in the midst of filth and dirt. After this was removed, a large bowl of cold milk and bread was put on the table, which we partook of in the same manner as the first

dish, and in the same disorder. The spoons were immediately taken out of the greasy pork dish, and (having been just cleaned by passing through the *mouth*) were put into the milk ; and that, with all the *sang froid* necessarily attending such habitual nastiness. Our *table*, which was none of the cleanest (for as to *cloth*, they had none in the house), was placed in the middle of the room, which appeared to me to be the receptacle of all the filth and rubbish of the house ; and a fine large fire, which blazed at one end, served us instead of a candle.

Wishing to go to bed as soon as possible (though, by the by, we did not expect that our accommodations would be any of the most agreeable), we requested to be shown to our room, when, lo ! we were ushered up a *ladder*, into a dirty place, where a little hole in the wall served for a window, and where there were four or five beds as dirty as need be. These beds did not consist (as most beds do) of blankets, sheets, &c., but were truly in the Dutch style, being literally nothing more than one feather bed placed on another, between which we were to creep and lie down. The man, after showing us this our place of destination, took the candle away, and left us to get in how we could, which we found some difficulty in doing at first ; however, after having accomplished it, we slept very soundly till morning, when we found we had passed the night amongst the whole family, men, women, and children, who had occupied the other beds, and who had come up after we had been asleep. We got up early in the morning from this inhospitable and filthy place, and, saddling our horses, pursued our journey.


October 12th, 1796.—At ten o'clock we arrived at Mc Connell's-town, in Cove Valley (thirteen miles), hav-

ing first passed over a high ridge called, in Howell's Map, the North Mountain ; and here we left that beautiful valley, which is enriched by so many streams, and abounds with such a profusion of the conveniences of life ; a country than which, if we except Kentucky, is not to be found a more fertile one in the whole of the United States.

On our descent from the North Mountain we caught, through every opening of the woods, the distant view of Mc Connell's, whose white houses, contrasted with the *sea* of woods by which it was surrounded, appeared like an island in the ocean. Our near approach to it, however, rendered it not quite so pleasing an object ; for it consisted but of a few log-houses, built after the American manner, without any other ornament than that of being whitened on the *outside*. There was a pretty good tavern kept here by a Dutchwoman, where we stopped to breakfast ; and, leaving this place, we crossed a hill called Scrubheath, at the end of which was Whyte's tavern (ten miles) : we did not stop, but went to the top of Sideling Hill (two miles), where there is a tavern kept by Skinner, where we dined. Sideling Hill is so called from the road being carried over this ridge, *on the side of the hill*, the whole way ; it is very steep in ascent, and towards the top appears very tremendous on looking down.

From this tavern to the Junietta, a branch of the Susquehannah river, is eight miles. The hill terminates at the river, and the road down to it is a narrow winding path, apparently cleft out of the mountain. It so happened that when we came to this defile, a travelling man with a number of packhorses had just entered it before us ; and as it

was impossible to pass them, we were obliged to follow them down this long winding passage to the river, at their own pace, which, poor animals, was none of the speediest. The sun, though not set, had been long hid from us by the neighbouring mountains, and would not lend us one ray to light us on our melancholy path. We fell into conversation with our fellow-traveller, and found that he had been to Philadelphia, where he had purchased a number of articles necessary to those who live in this part of the country, and which he was going to dispose of in the best manner possible. The gloominess of our path, and the temper of mind I happened to be then in, threw me into reflections on a comparison of this man's state with my own. At length a distant light broke me from my reverie, and indicated to us a near prospect of our enlargement from this obscure path ; and the first thing that presented itself to our view was the Junietta river, which, flowing with a gentle stream between two very steep hills, covered with trees to the very top, the sun just shining, and enlightening the opposite side, though hid to us, presented one of the most enchanting and romantic scenes I ever experienced. From this place to Hartley's tavern is eight miles, and this we had to go before night. It was sunset before we had reached the summit of the opposite hill of the river. From this hill we beheld ourselves in the midst of a mountainous and woody country ; the Junietta winding and flowing on each side of us at the foot of the hill ; the distant mountains appearing in all the *wildness of majesty*, and extending below the horizon. The moon had just begun to spread her silver light ; and by her assistance we were enabled to reach our destined *port*. The road, which



was carried along the side of a tremendously high hill, seemed to threaten us with instant death, if our horses should make a false step. Embosomed in woods, on a lonely path, we travelled by the 'kind light of the moon till near eight o'clock, when we reached our place of destination. It was a very comfortable house, kept by one Hartley, an Englishman, and situated in a gap of the mountains, called in this part of the country Warrior's Gap, and which affords an outlet or passage for the Juniatta river, which here is a fine gentle stream. The country just about here was very mountainous ; yet our landlord had got a very pleasant spot cleared and cultivated, and which furnished him with the principal necessities of life. Finding this an agreeable place, we stopped here three days, and went up into the mountains to shoot ; but, being very young hands at this diversion, we were always unsuccessful.

On *Saturday, October 15th*, we set off from Hartley's about eleven o'clock, and proceeded to Redford (six miles), which is a pleasant place, and agreeably situated, and contains a great many houses. The town is supplied with water from the neighbouring hills, conveyed in pipes to each house, and to a public place in the middle of the town. We left this place about half-past twelve, and proceeded to Ryan's tavern, at the foot of the Allegany mountain (eleven miles). Here we dined ; and after dinner, we proceeded up the mountain, the top of which we reached about five o'clock ; and here I was surprised to find a number of little streams of water flowing through some as fine land as is to be met with in the United States, and abounding with fish. This appearance upon the top of so high a mountain is not a little remark-

able ; but I have since found it to be the case in other ridges of mountains which I have passed over. We intended to have gone on to Webster's this evening, but the weather proving so bad, we called at a little house on the road, in order to stop during the night. But we were informed that they could not accommodate us ; however, they directed us to a person about a mile off, where they thought we could get accommodated ; accordingly, striking across the woods, we proceeded to this house, and, after some little trouble, and in a very tempestuous night, we found it out, and here took up our abode for the night. Our landlord's name was Statler, and his residence is about eight miles from Ryan's. Here we found a very comfortable habitation, and very good accommodation ; and though situated at the top of the highest ridge of mountains, we experienced not only the comforts, but also some of the luxuries of life. From the stone which forms the base of this mountain they make millstones, which are sent to all parts of the country, and sell from fifteen to twenty and thirty dollars a pair. Land sells on these mountains for two dollars an acre. We found this so comfortable a place, that we stopped here to breakfast the next morning (*October 16th*), and then we proceeded to Webster's, at a place called Stoystown (nine miles), where there is a good tavern, and where we stopped to bait our horses. About a mile before we came to Webster's we passed over Stoney Creek, which has a great many different branches, and rather large, but most of them were dry, owing partly to the season, and partly to their lying so very high. About nine miles further we stopped at Murphy's, where we baited our horses ; but the habitation was so uncomfortable, and

their accommodations so miserable, that we could get nothing for ourselves; we were therefore obliged to defer till the evening taking any refreshment. On leaving this place we crossed Laurel Hill, which is near nine miles long, and which is the highest ridge of the Apalachian mountains: it is rather a ridge upon a ridge, than a mountain by itself, as it rises upon the Allegany ridge. The perpendicular height of this ridge is 4,200 feet; and in crossing it we were not a little incommoded by the cold winds and rain which generally infest the summit. This, together with the badness of the roads (being nothing but large loose stones), made it one of the most unpleasant rides I ever experienced. It was near dark before we descended this mountain; and we had then to go three miles to a poor miserable hut, where we were obliged to spend the night amidst the whole family and some other travellers, all scattered about in the same room.

About half-past six the next morning (*October 17th, 1796*) we set out from King's, and crossing Chestnut ridge, we arrived at Letty Bean's to breakfast (seven and a half miles). After crossing Chestnut ridge we took our leave of the Apalachian mountains, having passed 170 miles over them, from the Blue ridge to Chestnut ridge. These mountains are for the most part very stony and rocky, yet have a great quantity of fine land on them, even on their very summits. The roads which are carried over them are much better than I expected; and if from the tops of them you can (through an opening of the trees) gain a view of the surrounding country, it appears like a sea of woods; and all those hills which appeared very high in our passing over them, are lost in one wide plane, extending

as far as the eye can reach, at least fifty or sixty miles, presenting a view not only novel, but also highly majestic. At other times, when you get between the declivities of the mountains, they appear in all the wildness of nature, forming the most romantic scenery the imagination can picture. It is not to be supposed, that immediately on leaving the Apalachian mountains the country subsides into a smooth level ; on the contrary, for several miles, both on the eastern and western side, the country is very hilly, not to say sometimes mountainous ; and it is said that the western side of the mountains is 300 feet above the level of the eastern side.

From the foot of the mountains to Pittsburgh is about forty miles, and here we arrived to dinner on the 18th *October*, having gone, during our route, about 297 miles from Philadelphia. The accommodations we met with were, upon the whole, tolerably good ; at least, such as a person (considering the country he was travelling in) might bear with : charges rather high. It cost us, together with our horses, two dollars a day each. The common charges on the eastern side of the mountains were : — For breakfast, dinner, and supper, $\frac{1}{2}$ dollar each ; oats, 12 cents. per gallon. On the western side, dinner and supper were charged sometimes 2s., sometimes 2s. 6d., and breakfasts, 18d., (Pennsylvania currency). For breakfast we generally used to have coffee, and buck-wheat cakes, and some fried venison or broiled chicken, meat being inseparable from an American breakfast ; and whatever travellers happened to stop at the same place, sat down at the same table, and partook of the same dishes, whether they were poor, or whether they were rich ; no distinction of persons being made in this part of the country.

Pittsburgh is pleasantly situated at the junction of the Monongahela and Allegany rivers ; the union of which two forms the beautiful river Ohio. The southern bank of the Monongahela is near 300 feet high, and almost perpendicular ; the top of which subsides into a level country. The town, which is situated in north latitude $40^{\circ} 25' 50''$, is built on a beautiful plain at the point of the two rivers, which plain extends a considerable way along the banks of both, and at a small distance from them is terminated by the high country. This appearance is very common in the western parts of America, and arises from the general surface of the ground being so much higher than the beds of the rivers. Innumerable excavations are formed by every little running stream, which disfigure the face of the country very much.

The town, which contains about four hundred houses, is laid out nearly on Penn's plan, though the streets do not cross each other at right angles ; but those which are near the river are so formed as to run parallel to it. It was first settled about 1760, and is famous for being the subject of dispute between France and England in 1756, and in part hastened the rupture between the two countries. Louisiana and Canada being then in the hands of the French, they wished to unite these two countries by a chain of forts, and with that view they surprised and took a fortified post which the Virginians had established on the forks of these rivers : here they erected a fort, which was called Fort Du Quesne. To reduce this, and expel the French from this part of America, was the object of General Braddock, whose defeat is well known to every one conversant with the history of this period. Washington had been sent to attack this post some months prior to this, but his attempts were unsuccessful.

On the approach, however, of General Forbes, in 1758, the French retreated down the Ohio to their settlements on the Mississippi, and left him in possession of the place, the name of which he changed to Fort Pitt, in honour of the Premier. The English demolished the block fort which the French had erected, and raised a regular fortification at the point of the town, consisting of five bastions, with a ravelin facing the Ohio, all of which is now in ruins; for, though a fort here was absolutely necessary at the first settling of the country, and is still kept up, yet it is nothing more than a *block* fort. These *block* forts are laid out upon the same principles as other forts, but instead of having either a glacis, covered way, ditch, rampart, or parapet, they consist of nothing more than very thick planks of wood, fourteen or fifteen feet high, set upright in the ground, with holes bored in them at certain distances, through which the garrison present their muskets; and they are much better calculated for a defence against *Indians*, than the European method of constructing them, as well as being less expensive.

From the period we have been mentioning to the close of the American war, the inhabitants of this country had to settle their plantations and reap the produce of them amidst continual attacks of the Indians, who never ceased, night or day, to harass and distress them. Every farmhouse was then a fortification, and was so built, that it might be defended against the Indians, let them attack on which side soever they chose. The upper part of the house projected considerably beyond the lower, and holes were bored in the floor, through which they might fire down upon the enemy, if they should approach to set fire to the house. These houses are called block-houses, and

are still to be seen in many parts of the country, a monument of usurpation on the one hand, and of predatory warfare on the other. A person in travelling this country will often hear the sad story of sons and daughters being shot within a few yards of the house, whilst following the plough or tending the cattle, by Indians, who perhaps had been lying in wait for weeks for an opportunity of destroying the encroachers on their property. Truly may this country be said to have been established in blood, as there are very few of the first settlers but have felt the effects of Indian revenge in the loss of some part of their family. But to return to Pittsburgh.

Soon after the close of the American war, when the United States found itself at peace with all the Indian tribes, this town, from its peculiar situation, being the depôt for every thing passing down the Ohio, (the navigation of which had been considerably increased since the infant state of Kentucky had been settled,) began to rise considerably in importance ; and at present may challenge any of the western counties of Pennsylvania for its size and commerce. Through this town is the great channel of emigration to those countries lying on each side of the Ohio, between the Wabash and Tennessee rivers : and here, after coming in shoals across the Allegany mountains, either in waggons or afoot, they stop to supply themselves with boats to carry them down the river. These boats, which may be more properly termed rafts, are built without one particle of iron in their composition ; they are generally from 30 to 40 feet long, and about 12 feet broad, and consist of a framework fastened together with wooden pins, which constitutes the bottom

of the boat, and to this is fastened a flooring, which is well calked to prevent leaking; the sides are about breast high, and made of thin plank; and sometimes there is a rude kind of covering, *intended* to keep the rain out. These boats draw very little water, not enough to sink the framework* at the bottom under the water, and are generally furnished with a pair of oars, not so much to expedite their progress, as to keep them from the shore when they are driven towards it by the current; and there is a pole projecting from the stern, to steer them with. When they are going down the stream, it is immaterial which part goes foremost; and their whole appearance is not much unlike a large box floating down with the current. The article of boat-building forms one of the chief employments of this town. The common charge for boats of this kind is a dollar, and sometimes $1\frac{1}{2}$ dollars, for 12 square feet, that is, as to her bottom: thus a boat 40 feet long and 12 feet wide would cost 40 dollars, at 1 dollar per 12 feet. Ironmongery forms another considerable article of commerce in this town, but it is chiefly of the coarser sort, such as is used for mills, ploughs, and the various articles of husbandry. There is a great quantity of iron near this place, which is brought down the Monongahela river; and as to coal, it abounds very much all over the western country, and lies so near the surface of the ground, that the waggon wheels often cut into it on the roads: it is of an excellent quality, and extends for *some hundred miles* over the country. The inhabitants lay it in at about $3\frac{1}{2}$ d. sterling per bushel.

* The boat we had was 12 feet broad, 36 feet long, and drew 18 inches of water when she had upwards of 10 tons of goods in her.

The waggons which come over the Allegany mountains from the Atlantic states, (bringing dry goods and foreign manufactures for the use of the back-country men,) return from this place generally empty ; though sometimes they are laden with deer and bear skins and beaver furs, which are brought in by the hunters, and sometimes by the Indians, and exchanged at the stores for such articles as they may stand in need of.

At the tavern where I put up, there was a young Indian who was on his return to his own tribe ; he came in with the army of the United States at the close of last war with the Indians, when they were defeated by General Wayne, in which action his father and uncle bore a conspicuous part, and in which they were the leading men. I remembered seeing him about a twelvemonth back at Philadelphia, when he first arrived : he talked English very well, but was very shy when any one spoke to him, as all the Indians are, though upon a better acquaintance he would be facetious, and sometimes would be ridiculously antic. He mentioned a fact, which is scarcely credible, but which was confirmed by several officers then in the house, and who were in the engagement :—that immediately on the motion of General Wayne's army to attack the Indians, he ran with all the haste imaginable, to give his countrymen the first notice of their approach, and absolutely passed over the distance of ninety miles in twenty-four hours ! To however great lengths the powers of the body or the mind may be carried, yet this seems to stagger our faith, and to cause us to doubt whether he might not be deceived with respect to the distance.

The width of the Monongahela river at its junction

with the Allegany is 1,089 feet; and the Allegany is nearly the same width. When I arrived there the water was so low that cattle waded across both rivers; though, when the rains come down, they nearly overflow the banks, which are about thirty feet high. It having been very dry for some weeks prior to our arrival there, we were obliged to wait some time before the river was high enough for us to venture down; for in low water on the Ohio, there are a number of rocky shoals which extend the whole width of the river, and over which the water is driven with great impetuosity, causing it to ruffle and roar like a milltail, which makes it dangerous for boats going down at this season of the year, till the water has risen high enough to cover these obstructions. These places, which are very numerous till you arrive at Tart's Rapids, are called by the inhabitants "Riffles;" I suppose, a corruption from the word "ruffle," as the water is violently agitated in those parts.

The principal part of the inhabitants in this place are either storekeepers or engaged in some handicraft. The houses (which are mostly of wood) are generally well built for a new-settled place; though they have lately taken to building them with brick, of which there are great quantities made near the town. A new town-hall which they were building will add much to the beauty of the place.

M. Laches, a general in the French army, who boarded in the same house with us, intending to proceed down the Ohio in a small skiff which he had purchased, we agreed to go down a little way with him, to see whether the river was deep enough to take our boat down or not. Accordingly, about twelve o'clock we

started, and, I must confess, I felt myself highly delighted on first entering this beautiful stream: a stream which, after running near 1,500 miles, and receiving several others almost as large as itself, empties itself into another still larger, where it is considered as a *mere rivulet*.

We had not proceeded above two or three miles, before we came to one of those riffles I have been speaking of, and just above which I observed several boats made fast to the shore, fearing to venture over it. We made towards that part of the river where the commotion* was the greatest, and, our skiff being light and narrow, we were carried through without sustaining any accident. It is impossible to pass these places without some momentary sensations, which such a conflict of the rocks and waters naturally excite; otherwise, the rapidity of the motion with which you are carried through the stream is far from being unpleasant; and, under the guidance of a person who understands the navigation of the river, you may wholly divest yourself of fear for your personal safety.

We proceeded about thirteen or fourteen miles down the river, having passed over six of these riffles in so short a distance; and here we put ashore about an hour before sunset, at a farmhouse we saw on the banks. Here we stopped, intending to pass the night; and ac-

* Contrary to what an unexperienced person might suppose, it is always the best way to make towards that part where the water is most violently agitated, as *there* the river is the deepest, and there is no danger unless your boat strike against the rocks. By attending to this observation, a person may generally conduct his boat with safety.

cordingly we went a little way into the woods, and killed some squirrels for our supper, and bringing them home, the old gentleman of the mansion, whose name was Woollery, furnished us with some turnips, pumpkins, and other necessaries, and we soon had a dish of excellent soup. Whilst this was getting ready, the general (who had brought his violin with him, on which he plays exceedingly well) struck up a tune, which soon brought in the old gentleman's family, among whom were three or four pretty daughters. Seeing such a party collected together, a dance was immediately thought of, and a dance was soon commenced, not much in the style either of Bath or Paris, but sufficiently pleasing to drive away the gloom inspired by the surrounding wilderness, and to banish all idea of separation from civilized society.

The general was a very pleasant man, and kept us agreeably entertained the whole evening. After supper, some blankets were spread on the floor before the fire, (the only bedding which is to be expected in this part of the country; and not always *that*, unless you take it with you), and we all laid down and slept very soundly till morning. As it was the first time that I had ever experienced this new kind of *couch*, it was some time before I could compose myself to sleep; but so far does custom influence our dispositions and conduct, that it will be seen in the sequel I have often preferred this mode of sleeping when I have had the choice of a feather bed. In the morning, to our regret, we parted with the general, he proceeding down the river, and we endeavouring to make the shortest way by land through the woods to Pittsburgh. We took some breakfast before we started, and then, loading our guns, we struck into

the woods, and in the afternoon we found ourselves upon the banks of the river, about three miles below Pittsburgh, where we had observed the boats the day before. We went aboard one of them, and, getting some refreshment, reached town in the evening, having in the former part of our route missed our road, which carried us some miles out of our way.

Thursday, November 24th, 1796.—The river having risen within these few days, in consequence of some rain which had lately fallen, we started from Pittsburgh this afternoon, about three o'clock ; however, we did not proceed above four miles down, as the stream was very slow, and we were afraid to venture in the night in consequence of the riffles, which were not completely covered ; therefore, seeing some other boats near the shore, we made towards them, and joined them for that evening. I thought it a very pleasant sight to see so many boats floating down the stream at the same period. The late dry weather had prevented all navigation for some time, and the vast body of emigrants and storekeepers who were bound to Kentucky made them take this advantage of proceeding on their voyage. Accordingly, as soon as the river was reported to be navigable, all the *Kentucky boats* (as this flat-bottomed craft is termed) were in motion, and eager to pursue their route. As the gentleman who travelled with me was going to establish a settlement on the Miami river, he had got every article that he thought would be necessary in his new habitation ; therefore, we were not so badly accommodated as some of the boats were, who went sometimes most miserably supplied, with scarcely a covering to the boat or a blanket to lie down on, and barely a pot or a kettle to dress

what provisions they might chance to meet with. We had laid in a sufficient quantity of beef, mutton, flour, bacon, and what other provisions we thought we might want, and we had three or four good feather beds and plenty of bedding; and as it was very cold weather, we stopped every crevice we conveniently could, and made ourselves a very comfortable habitation: and as we might now and then meet with a plantation on the river side, where we might get milk, or eggs, or butter, we had not the prospect of a very unpleasant voyage, especially as we expected to reach our place of destination before the winter set in. However, our views were disappointed in this respect, as we were frozen up ere we had proceeded half the distance, our boat carried off by the ice, and ourselves reduced to great straits for provisions in the midst of a wilderness.

Friday, November 25th, 1796. — By daylight we started in company with another boat. The stream was very dull, we therefore kept our men constantly rowing, and then could not proceed above two miles and a half an hour. At eleven we came to Woollery's, where we put the boat ashore to bring off the old gentleman to pilot us over a very bad riffle just below his house. When we had got him aboard, we reminded him of the pleasant evening we passed at his house, which he seemed to remember with much satisfaction. After we had passed over the riffle we gave him half a dollar, (which is a fee they generally expect,) and set him ashore again. We stopped this night opposite the mouth of Big Beaver Creek, on the western side of which creek there is a new settlement formed, called Fort Mackintosh. We sent the men ashore to cut down some wood; for the wind was

very high, and the weather very cold ; the effects of which we found the next morning ;—

Saturday, November 26th, 1796 ;—for we observed several large pieces of ice floating down the river, some of which obstructed our passage very much this day ; and we observed several boats ashore, which were afraid to proceed any farther till the ice had passed off a little. About one we passed the Pennsylvania line, which crosses the river from north to south, extending as far northward as lake Erie. The wind was very high to-day, which, together with the quantities of ice, which seemed to increase, determined us to wait till the weather should prove more favourable before we proceeded farther. Accordingly, the next morning,—

Sunday, November 27th, 1796,—having proceeded about two miles farther on the river, we observed two other boats made fast to the shore, and accordingly joined them ; and as there was a plantation within a short distance of the place, we got supplied with what little necessaries we might want ; and amused ourselves by shooting in the woods during the short time we were here, which was till

Wednesday, November 30th, 1796,—when, the river having cleared itself of a great quantity of ice, we determined to proceed. Accordingly about eleven o'clock we started, and, in spite of all the obstructions which the ice was continually throwing in our way, we managed to get eleven miles this day. The next morning,—

Thursday, December 1st, 1796,—we got fast upon a riffle near Brown's Island ; but as it was a sandy one, we got off without any danger, on lightening the boat. A little after three we passed Buffaloe Town and Creek.

Buffaloe Town (which I believe is also called Charles-town) is a new settlement, containing about thirty or forty houses, very pleasantly situated on the banks of the Ohio, and just at the mouth of the Creek, on the eastern side of it. It was about two miles below this town where we stopped this night. The next day,—

Friday, December 2nd, 1796,—we met with a disaster which threatened us with very disagreeable consequences; but from which we were happily relieved, without experiencing any material loss. It was about two o'clock in the afternoon; the river was very full of ice, and we were floating along at a slow pace, when, about a mile above the town of Wheeling, (where there was a riffle), we got aground, and all our endeavours to get her off were ineffectual, and no remedy was left but to unload the boat. Accordingly we loaded a little skiff which we had with us, and sent her down to the town; and this we repeated twice before it grew dark; but our endeavours to get her off were still ineffectual, and we were obliged to remain in this situation all night,—in the middle of the river, the stream running with great rapidity and bringing down with it vast quantities of ice, which came against us with great violence, and with a noise like thunder, and threatened at every repeated stroke to stave the sides of the vessel. In order to break the force of the ice, we nailed a plank on the stern, and fixed the oars out at the after part of the boat, so that the ice might be cut in two and separated ere it struck us. This had the desired effect, and we had the satisfaction of seeing daylight appear without experiencing any other loss except that of sleep; and early in the morning,—

Saturday, December 3rd, 1796,—we sent another skiff-

load down to the town ; and a *flat* coming down the river about breakfast time, we got the men to stop, and we then unloaded the boat sufficiently to let her float down to the town, which place we reached about ten o'clock. The stream was so rapid from the place where we ran aground down to the town, that one man in the skiff could not oppose the current with a pair of oars ; and it was with difficulty that two could accomplish it.

Wheeling is about a hundred miles down the river from Pittsburgh, and may contain about fifty houses. It was settled some few years back by Mr. Lane, who has a house in the town built with stone. Lane is related to some Indian families by intermarrying with them ; and some of them were visiting at his house when we were there. There is a creek runs from east to west at the south end of the town ; and on the north side of the creek, on the banks of the river, there is a block fort, in which are about five or six men. A number of these forts are established at different places on the Ohio, and were of use formerly, when the country was first settled, to keep off the incursions of the Indians ; but, on account of the frontier settlements of Kentucky and the north-western territory, these surrounded colonies do not stand in need of any farther support.

Wheeling, like Buffaloe, is situated on a bottom about fifty or sixty feet* above the bed of the river, and surrounded at the back by very high hills. There has been a road lately *blazed*† on the north side of the Ohio,

* This is only the case when the river is low ; at other times the water flows even with, and sometimes over the banks, so amazingly does this river rise when the floods come down.

† To *blaze* a road, is to mark the trees on each side with a

which reaches from Limestone, in the state of Kentucky, to Pittsburgh ; and it crossed the Ohio at this place, which renders it a town of great resort when the roads are passable. These roads are seldom travelled but in parties ; and they are obliged to take their provisions with them, and also blankets for their bedding ; in which manner they travel somewhat like our gypsies. There was a party of Kentucky merchants collecting when we were there, and they were to start in a day or two. If a person intending to go through the wilderness does not know of a party going, it is not unusual for him to advertise in some of the provincial papers ; and sometimes the parties themselves will advertise, in order that others may join them ; but the best and most usual way is to stop at the last town (such as Wheeling) through which they must pass, and then join them as they go through.

Wednesday, December 7th, 1796.—After laying in a fresh stock of provisions at this place, and repairing the little damage we experienced from the ice, we pushed off from the shore, and continued our progress down the river. We had stayed near five days at Wheeling, during which we were in doubt whether we should proceed any farther or not till the river should rise, and get a little clearer of ice. This morning we found it had risen about five inches, in consequence of some rains which we supposed had fallen near the heads of the river ; and this determined us to continue on. Mr. Bell, a Kentucky merchant, lay at Wheeling with his boat at the same time

tomahawk ; it is done by chopping off the bark about three or four inches broad, and six or eight long ; and a person well used to it will blaze as he rides along. If the bark be not completely cut through, the mark will never grow out.

that we did ; and we both started together. We went about twelve miles down the river this day ; and in the evening put to, on the southern shore of the Ohio, opposite a small settlement, called Grave Creek, from the number and size of some ancient mounds which are found in that place, and which are supposed to have been burying mounds. Of these we shall have occasion to speak hereafter. The next morning,—

Thursday, December 8th, 1796,—we floated about six, and at twelve we put ashore, to inquire concerning a bad riffle at Capteen Island, which we understood was difficult to pass. Seeing a bit of a hut on the shore, we made our boat fast to some trees on the banks and went to inquire about it. We stopped here near two hours. The person whom we met with there was just come down the river, and was forming himself a plantation ; he had made himself a miserable hut, and was erecting some kind of shelter for the few cattle he had brought with him. About two o'clock we left him ; and, passing Capteen Riffle in safety, we proceeded about nine miles down the river this day. Here we put ashore at a plantation which was inhabited by Mr. Daily, an Irishman. He informed us that the Ohio was frozen up about five miles, and that it would be impossible for us to proceed. The weather had been very cold for several days, and the river had continued to fall ; so that we determined to moor our boat in some place of safety, where she might not be exposed to the logs and large trees which are continually drifting down the river, and there to wait for a change of weather. Accordingly, the next day,—

Friday, December 9th, 1796,—Heighway and myself walked down the banks of the river, about five miles, to a

place called Fish Creek, and, to our sorrow, found it completely blocked up with ice, and frozen over for several miles down, so that it was absolutely impossible to proceed. We observed four or five boats on the opposite shore, who were in the same predicament with ourselves. Having satisfied ourselves in this respect, we returned home to our boat, and the next day,—

Saturday, December 10th, 1796,—we dropped down the river about a mile to a place which we had observed yesterday in our walk, and which we conceived more secure from the bodies drifting down the river, than the one we were in. Having moored ourselves, as we conceived, in a place of safety, and having every prospect of passing the winter in this situation, we began to apply ourselves to the laying in of a good stock of provisions. Mr. Bell's boat was with us; and another boat which was proceeding down the river had joined us; and we all lay moored together; so that there were fourteen or fifteen of us in company: and we every day sent out some of them into the woods with their guns to hunt for deer, turkeys, bears, or any other animals fit for food. We had a good quantity of flour and of Indian meal with us; so that as long as our gunpowder lasted (of which we were very sparing) we had not much prospect of suffering a great deal from hunger; which, in a country like that, surrounded with plenty, would have been truly shocking.

There was a plantation or two in the neighbourhood, one of which, I mentioned, belonged to Mr. Daily, but they could render us no assistance, nor furnish us with any article we wanted; they were, in fact, in the same destitute situation in which we were—obliged to depend upon

their guns for subsistence ; and if they gathered a crop of corn in summer, it was generally gone before the winter was over, or at least reduced to a very scanty pittance. There was also a settlement about nine miles off, called Grave Creek ; but it was impossible to get to it by water, and the road by land to it, through the woods, was very bad, and in this weather even dangerous. However, as I had a great desire to see the curiosities which are in that place, I could not refrain from going over there ; accordingly, getting Mr. Daily to be my guide, we set off one afternoon (*December 16th*) to see them. The sun had shone beautifully bright all that day, and it was about two hours high when we started. We at first traversed over a flat bottom on the banks of the river, and then, ascending a very steep and high hill, we were carried along the ridge of it till we came within about a mile of the place. As this hill carried us above the level of the surrounding country, every break through the trees presented to us a *sea of woods*, whose tops, just tinged by the setting sun, displayed one of the most beautiful sylvan scenes I ever remember seeing ; at the same time, every now and then the Ohio opened to our view, whose gentle stream, covered with the drifting ice, formed a fine contrast to its umbrageous shores. We had scarcely proceeded half our journey before a bear with three cubs crossed the road at some distance before us. She did not observe us, neither did we attack them, as we had but one gun in company. They were making towards the river, and Mr. Daily informed me that it was most probable they would find shelter in the rocks on the shore for that night, and in the morning cross it ; however, when we got to Grave Creek, we sent some persons after them ;

but I never heard whether they took them or not. Within about a mile of Grave Creek, we had, from the point of the hill we were just descending, a fine prospect of the rough buildings which compose this settlement ; and the smoke ascending through the thick woods, which was beautifully tinged by the setting sun, heightened the effect of the scenery. Here too we had another view of the Ohio, which had just shaped its course round a point of land not a great distance from us, and whose bed might be traced (though unseen) by the dark cavity which was observed amongst the tops of the trees, which extended as far as the eye could reach. My attention was taken off from this beautiful prospect, on which I dwelt some time with pleasure, by the roughness of the path which carried us down the hill. It was at least five or six hundred feet high from the level of the river, and nearly perpendicular ; at least so much so that there were steps cut in the ground in many places like a pair of stairs, and I often turned round with my face towards the ground, as if I were going down a ladder, fearful that my foot might slip had I proceeded otherwise. However, with regret, we descended the dark valley below in safety, and soon arrived at the settlement, where we slept that night ; and in the morning I went out to see the curious remains of antiquity with which this place abounds. They consist of circular and square entrenchments and mounds, which are scattered at different distances for ten or twelve miles along the banks of the Ohio. One of the principal circular entrenchments is on the very spot where the settlement is built ; and three of the principal mounds also are within a hundred yards of the same, one of which is near one hundred feet high,

and has trees growing on it to the very top, some of which must be very old ; at least they appear of the same size and age with those which grow in the surrounding valley. With respect to the entrenchments, they are about breast high, and appear, from their situation, &c., to have been intended for, and used as, fortifications ; and these mounds (from which the settlement takes its name) seem to have been graves, either used as public burying places, or thrown up for those dead who might have fallen in some engagement near the place. I was informed that one of these mounds has been opened, and that it was found to contain human* bones, which (if true) confirms the opinion. There are three mounds at this place, the principal of which I have mentioned as far exceeding the others in size and height. I walked up to the top of it, and found that it took exactly one hundred steps to reach it ; and each of these steps I computed to rise me about a foot, so that the mound was at least one hundred feet high. The top of it was sunk in the middle, which

* I have seen several of these ancient remains in different parts of the country near the Ohio ; on the two Miami rivers they are very numerous, and I have not the least doubt in my own mind but that they were built by a race of people more enlightened than the present Indians, and at some period of time very far distant ; for the present Indians know nothing about their use, nor have they any tradition concerning them. I have seen some of them so small, as to induce a belief that they were intended for the defence of one family only. In other places I have seen some of them so large as to be capable of containing a great army : in this latter case, they have generally two or three or more of the burying mounds near them. Their situation is generally near some water ; and if they should happen to be at some little distance from it, there is sometimes a covered way made down to it, in order to defend the garrison when they go down to fetch it.

(if it really has been a burying-place) may arise from the dissolution of the dead bodies beneath. I walked round the top of it, and found it took me about seventy steps, which, allowing two and a half feet for a step, makes the diameter of the top, at a rough calculation, between fifty and sixty feet. On a tree rising from the middle of the hollow on the top of the mound there were a number of names carved by those whom curiosity had drawn to visit this place. As to the entrenchments, what remained of them was perfectly circular ; but in many parts the ground had been torn up either by the cattle, or to plant their corn.

Having satisfied my curiosity with respect to this place, we set off in the afternoon, and, striking through the woods, reached our boat in the evening.

We continued at this place about a fortnight, anxiously expecting every day that the river would break up, and thereby give us an opportunity of proceeding on our route. Some heavy rains which had fallen within these few days gave us reason to hope for this favourable event. But, alas! how vain are the expectations of men, and how short-sighted in all their views! The event, as we had fondly imagined, did take place, but with circumstances that rendered our situation still more unpleasant and dangerous.

It was on *Tuesday*, the *20th* of *December*, that our spirits seemed to be more than commonly high at this prospect of escaping from our imprisonment. We had even been a little more lavish than common of the rough fare which we met with in these uncivilized parts. The snow was upon the ground, and the weather severely cold, the thermometer standing at seventeen degrees

below zero. The noise of the Ohio, bound in its wintry chains, was heard no more ; and the rude blast, whistling through the trees, strongly marked out to us our separation from an inhabited country. Our boat was firmly frozen up by the ice, close to the shore, and we had the precaution to fasten her with strong chains to some large trees on the banks, lest the ice (when it broke up) might carry her away ; we had also cut down a large tree just above the boat, (which was not perfectly separated from the stump,) in order to break the force of the ice floating down the stream, and which, coming against our boat, might endanger it. Having taken these precautions we went to bed soon after sunset, and about one o'clock the next morning,—

Wednesday, December 21st, 1796,—we were awakened out of our sleep with a noise like thunder, and, jumping out of our beds, we found the river was rising, and the ice breaking up. All attempts would be feeble to describe the horrid crashing and tremendous destruction which this event occasioned on the river. Only conceive a river near 1,500 miles long, frozen to a prodigious depth (capable of bearing loaded waggons) from its source to its mouth, and this river by a sudden torrent of water breaking those bands by which it had been so long fettered ! Conceive this vast body of ice put in motion at the same instant, and carried along with an astonishing rapidity, grating with a most tremendous noise against the sides of the river, and bearing down everything which opposed its progress!—the tallest and the stoutest trees obliged to submit to its destructive fury, and hurried along with the general wreck ! In this scene of confusion and desolation, what was to be done ? We all soon

left the boat in order every one to provide for his own personal safety ; but seeing that the precautions we had taken the day before prevented the ice from coming upon us so soon as it otherwise would have done, and that there was a chance, though at great risk, of saving some, if not all, the things from the boat, we set to, as earnestly as we could, to unload her. There were near eleven tons of goods in her, the principal of which were implements of husbandry, designed for Mr. Heighway's plantation ; the rest consisted of articles of barter, intended for the Indians, and of provision and other necessaries during our journey. We, in the first place, took care to secure these last mentioned ; and then we set about getting out the others, some of which were very bulky, weighing upwards of five hundred weight. We had not proceeded in this undertaking above a quarter of an hour, when a large sheet of ice came against our boat, and, with a tremendous crash, stove in one side of her ! We saw it coming, and happily escaped from the boat before it reached us. She was immediately filled with water, but as she was near the shore, and almost touched the bottom, (the water being very low,) she was not immediately covered. The river was rising at a very rapid rate, and as we knew that if we once lost sight of her, we should never see her more, and as we saw that there was still a chance of saving something more from the wreck, (though at the risk of our lives,) which might tend to make our situation more comfortable whilst we were obliged to stay here, and not leave us utterly bereft of every necessary, we determined upon making one more effort ; therefore, jumping into the boat, up to our middle in water, we continued to work near three hours, amidst vast fields of

ice, which were continually floating by us, and whose fury we would escape when they made towards us, on being warned by one of our party, whom we had set on the banks to watch. In this manner did we persevere, till we had got most of the things out of the boat, in one of the coldest nights ever remembered in this country: the thermometer* was at 17° below zero, and so intense was the cold, that the iron chain which fastened our boat had the same effect on our hands as if they had been burned with a hot iron. Farther, whilst we were in the boat this last time, the moment we raised our legs above the water, (in walking,) our stockings froze to them, before they were put down again, as tight as if bound with a garter! In such a situation and in such severe weather, it is a wonder we had not perished; and possibly we might, had not the river, which was now rising rapidly, completely covered our boat, and obliged us to desist from our attempts. Thus went our boat!—and thus went every hope of our proceeding on our journey! Thus were all our flattering prospects cut short, and none left but the miserable one of fixing our winter habitation on these inhospitable shores!

It was still dark when this event happened, and this, added to the desolation which was making around us, whose power we could hear but not discern, heightened the effect of our forlorn situation. Some women who were of our party had kindled a fire on the banks; and when we saw that no more could be done, we took our blankets, and clearing away the snow, lay ourselves down

* On the 22nd December, at 8 A.M., it was at 5° below zero; and on the 23rd December, at 8 A.M., it was at $7\frac{1}{2}^{\circ}$ below zero; at the mouth of the Ohio, as observed by Mr. Ellicott.

before it, and, overcome with fatigue, gave ourselves up to rest. Some of our party were so affected by the intense cold, and by so long exposure in the water, that their feet were frostbitten ; others had their legs swelled up in large knots as big as an egg. As to myself, I felt no ill effects from either.

When morning approached, a scene the most distressing presented itself to our view. The river was one floating wreck ! Nothing could be discerned amidst the vast bodies of floating ice, (some of which were as big as a moderate-sized house,) but trees which had been torn up from the banks, and the boats of many a family who had scarcely time to escape unhurt from such an unlooked-for event, and whose whole property (perhaps scraped together to form a settlement in this distant territory) was now floating down, a prey to the desolating flood. Canoes, skiffs, flatts, in fact, everything which was opposed to its fury, was hurried along to one general ruin.

As daylight advanced, we had also an opportunity of seeing in what situation we stood ourselves ; and here, instead of finding any ray of comfort or hope, we observed our misfortunes increasing upon us, for the bank where we lay was full fifty feet high and nearly perpendicular ; so much so, that it could not be ascended or descended without great difficulty. There happened to be a little bit of a level where the boat was, and where we placed the things we had preserved from the wreck ; but the water was rising so rapidly, that it had almost covered this place, and we were under the necessity (worn out as we were) of carrying them still higher up the bank, or they would have shared the fate of our vessel. This was a most laborious undertaking, and to have hauled them

to the top of the bank, would have taken us up some days ; we were, therefore, under the necessity of hauling them up *one by one* about two or three feet at a time, and lodging them behind the trees which grew on the bank, and which prevented their rolling back into the river ; and this we were obliged to continue to do till we saw the river had ceased rising ; and then we left them for a day or two, in order to rest ourselves from our fatigue, and to fix up some kind of habitation to protect us from the inclemency of the weather.

Having thus happily escaped from this danger, and saved most of our property from the flood, we set about erecting a covering under which to lodge it ; and this we did with a number of blankets and some coarse linen which we had brought with us : it was a rough sort of building, but such an one as answered our purpose in the situation we were in. We made it by fixing two poles in the ground, about ten or twelve feet asunder, and laying another transversely at the top of them. This was the front of our tent, and was left always open. The back and sides were formed by straight poles leaning against the horizontal one which was placed transversely across, and over them were thrown blankets, &c. This secured us in a measure from the rain, which ran off almost as fast as it fell ; and, in order to keep off the cold, we kept a large fire constantly burning in the front of our tent ; and thus circumstanced, we endeavoured to make ourselves as comfortable as we could, consoling ourselves, that it might have been worse with us ; and that even now we were not so badly off as many* of those who had descended

* By accounts which I saw in several of the newspapers afterwards, I found that the breaking up of the Ohio occasioned a

the river this season. Here we found full employment for some time in drying our goods, which had got wetted when the ice stove the boat. Some of the packages were so much frozen as to take three days standing constantly before the fire, ere we could get out their contents to dry them. This took us up near three weeks, during which time we had got into more comfortable lodgings. For in the neighbourhood of this place we had found a log-house, which appeared to have been used for the purpose of keeping fodder for cattle. It was open on all sides between the logs ; but this we soon remedied, by lining the whole with the blankets and coarse linen which before we had covered our tent with. We also built up a chimney in it, and had our fire wholly within doors ; so that now we began to look a little more in order, though there was no flooring to the house, neither was there any window, for

degree of mischief unknown in any preceding period. Out of several hundred families which descended the river this season, there were very few but experienced its ill effects in some measure or other. Some who were asleep in their boats at the time it happened had but just time to make their escape to the banks, whilst their boat (containing, perhaps, every particle of property which they possessed in the world,) was torn away by the violence of the current, and never seen more. Others were overtaken more unexpectedly, and, *property and all*, were hurried down the river, crying in vain to the spectators on the shore to come to their assistance. Some of these boats would happily strike the shore, where they were secured ; but others, many others, would soon be staved by the floating ice, and everything on board be lost. There was an instance of this kind recorded in the Pittsburgh paper, where a man and his family, together with a number of negro slaves, all perished in this manner : they were seen from the shore in several places along the banks, but no one would venture to their assistance, for fear of sharing the same fate.

all the light we had came down the chimney, which was large and wide, or in at the door; however, this was a *luxury* with which we could easily dispense, considering the hardships we had gone through; therefore, hauling all our goods to this place, and stowing them under this roof, we may, not improperly, be said to have commenced *house-keeping*. This was on the

24th *December*; and as it was above a mile from the place where we were, we made a sledge for the convenience of dragging our goods to the house; otherwise, we should never have been able to have accomplished it. We had four horses aboard with us, which expedited us in this undertaking very much.


December 25th, Christmas Day.—Two of our party being ill with the fatigues we had undergone on the 21st, the task of superintending the conveyance of our goods devolved upon me. We had been employed at it the whole of yesterday; and as soon as daylight approached this morning we began the same career again, nor did we cease this routine, except to take the scanty pittance we had saved from the wreck, till the setting sun and our own weary limbs told us it was time to close the scene once more. I could not think of the happy moments which were enjoyed in my own country on this auspicious day, and perhaps by those whose remembrance is the most dear to me, without contrasting them with my present situation. Here am I in the wilds of America, away from the society of men, amidst the haunts of wild beasts and savages, just escaped from the perils of a wreck, in want not only of the comforts, but of the necessities of life, housed in a hovel that in my own country would not be good enough for a pigstye, at a time too when my father, my

mother, my brothers, my sisters, my friends and acquaintance, in fact, the whole nation, were feasting upon the best the country could afford. I could not but picture to myself the fireside of my own home, where I saw them all assembled round ; a beam of happiness perhaps glistening in every face, save when after dinner I was remembered in their glasses ; then, perhaps, a sigh broke out from some of them, and the conversation might turn upon " where I was," and " what I was doing ;" but this dying away, I should soon be forgotten again, and they would return to spend the day in mirth and happiness. Ah ! little do they think of the hardships I have undergone, or of those which seem to continue to press us. Little do they think that, while they are partaking of all the bounties of nature, that I am suffering the contrary extreme through want ; and would gladly partake of the refuse of their table, or thankfully receive what they would give a common beggar at the door. Methought, if I could but make my appearance in the midst of them at this time, that I should scarce be remembered by them ; my long beard, my rough and tattered clothes, and all together would puzzle them at first to conceive what *stranger* was come amongst them ; at least, I think they would begin to chide the servant for admitting so uncouth a visitor before they would recollect or discover who I was.

Our meal this day was the most scanty we have had for some time. We had some apples on board our boat, of which, together with some coarse Indian meal, we endeavoured to make an apple pudding ; it was a rough kind of a one, but such as it was, it constituted our *only food* for this day. To be sure, we were in the midst of

plenty, for there was abundance of deer and turkeys in the woods ; but we were too much engaged in the confusion of our wreck to spare the time to go after them. However, finding our stock of provisions diminishing very fast every day, we were obliged, for our own preservation, to seek after them. Accordingly, we took it by turns to go out every morning with our gun and shoot whatever we could find ; and many a time would we lay ourselves down at night without a prospect of anything wherewith to break our fast the next morning, save what our guns might procure us the next day ; yet even in the midst of this apparent distress, we were very happy. We all enjoyed one of the greatest blessings of Providence, which is a *good state of health* ; and as to the rest, we were strangers to all those artificial wants which man in a civilized state has brought upon himself. Those which we stood in need of were easily satisfied ; and the very means which we took to satisfy them was one of our chief pleasures, and afforded us the greatest amusement. All that we wanted was the *necessaries* of life, the mere food we eat ; and the getting of this constituted our chief diversion. Whether it were the novelty of the thing which attracted us, or the scenery of the country, and the sublimity of its views, so very different from what we had been used to in the *old* country, I know not ; but certain it is, there is something so very attractive in a life spent in this manner, that were I disposed to become a hermit, and seclude myself from the world, the woods of America should be my retreat : there should I, with my dog and my gun, and the hollow of a rock for my habitation, enjoy undisturbed all that fancied bliss attendant on a state of nature. Often, when I have

wandered across the woods in search of game to carry home to my companions, have I been lost in contemplation raised by the grandeur and novelty of the scenery around me. Happy men! cried I, who, ignorant of all the deceits and artifices attendant on a state of civilization, unpractised in the vices and dissipation of degraded humanity, unconscious of artificial and unnecessary wants, secluded from all those pomps and ridiculous ostentations which serve to enslave one half of a nation for the gratification of the other; unshackled with the terrors which fanaticism and superstition inspire; enjoying equally the free blessings which nature intended for man, how much, alas! how much I envy you! Could I but renounce those habits which education and custom have endowed, how cheerfully would I join your lot, which men (more barbarous) have branded with the name of savage, but where are found health, happiness, and independence, three of the greatest blessings the Divine Being can bestow upon man! 'Tis true the arts and sciences have not found their way amongst you, but it is much to be doubted whether they bring with them their boasted advantages. Great pleasure may be derived from the pursuit of them by some of their votaries; but how few, alas! how few are they, in comparison to the bulk of mankind! And it will ever remain an undetermined problem, whether human happiness has kept pace with the progress that has been made in the arts of civilization;—whether man has not given up the innocence, happiness, and independence he enjoyed in a state of nature, for the vices, misery, and oppression which are evidently too glaring in an improved state of society. In the former situation, his wants are few, and those wants easily satisfied; and if at



any time, through accident, he be reduced to great distress for provisions, he takes without repining, in fact with thankfulness, the scanty pittance which Providence has allowed him : his happiness and his independence go together, and the latter is not to be taken away but with his life. In the other situation, view the contrast, and for the truth of it, read the history of man from the earliest ages to the present time.

Thursday, January 5th, 1797.—We had by this time got all our things hauled to our new habitation. We found the greatest difficulty in getting them up the bank, which (as I observed before) was upwards of fifty feet high, and nearly perpendicular. When I have been helping the men up with some of the heavier packages, our feet have slipped from under us, and the package (freed from its support) has come trundling down the bank, and with difficulty been saved from falling into the river again ; and this sometimes when we had nearly reached the summit of the bank, so that we had all our labour to go through again ; it often reminded me of our fellow-labourer in the regions below, as described by Homer in his *Odyssey* :—

“ I turn’d my eye, and as I turn’d, survey’d
A mournful vision ! the Sisyphean shade ;
With many a weary step, and many a groan,
Up the high hill he heaves a huge round stone ;
The huge round stone, resulting with a bound,
Thunders impetuous down, and smokes along the ground.”

Book XI.

However, we lost very little this way, and we had the satisfaction of observing things a little more in order ; and, if I may so speak, of being *pretty well settled* ; but

this afternoon an event happened which had nearly cost dear. By some accident or another our little habitation caught fire, and the whole roof (which was thatched) was in flames ere we knew anything of the matter ; our confusion was very great, as may be naturally conceived, when it is recollected that all our necessities and provisions, in fact everything which tended to render our situation at all tolerable, were under that very roof which we now had the mortification to see enveloped in flames. To make the matter worse, it was impossible to get at the water in the river, owing to the steepness of the banks, and the thickness of the ice near the shore ; but, as good luck would have it, there was a spring not a great way off, to which we sent all the vessels we had for water ; and by throwing wet blankets upon the roof, and as much water as we could get, we happily extinguished it without any further inconvenience than having thrown us into a terrible confusion and alarm. Had the flames got the better of our exertions, our situation would have been deplorable indeed ; we should then have been deprived at once of every means to render our forlorn situation at all comfortable ; for it would have been almost impossible to have saved any (or very few) of the things which were in the house ; for there was but one narrow entrance, and our packages were too bulky to be easily moved, and the house, being of wood, would soon have been destroyed. We suppose the accident must have happened from some sparks falling on the roof from the chimney.

I had observed before that there were two other boats with us when our accident happened on the 21st ult. These two boats did not receive any material injury ; for,

being small, and placed below us, our boat broke off, in a great measure, the force of the drifting ice, and they were still farther protected behind a bush of willows which grew just within the water ; these boats therefore went on down the river when the ice had cleared off a little, and left us by ourselves. Circumstanced thus as we were, we were under the necessity of getting another boat to carry us on ; but ere we could come to any resolution of this kind, or determine where we could get it accomplished, we had the mortification to see the river freeze over once more, and close up as fast as ever. However, this did not prevent us from getting a boat ready against it should break up again. Accordingly, two of the men who accompanied us being pretty good mechanics, we dispatched them off to Grave Creek, across the woods, where they might have the advantage of a saw to saw the planks for the boat, (for as to all other tools we had plenty of them with us,) and where they might have the assistance of more hands if required. Accordingly, about the middle of this month (January) they set out for Grave Creek, taking with them all the tools which they have occasion for in their undertaking ; and they set about felling some trees immediately, and soon put their work in a state of forwardness. But what relieved us most in our present distress, was their meeting with a supply of gunpowder, which, though small, was very acceptable to us, as we were reduced to our last charge, and were in a great dilemma what to do, as we depended on our gun for our daily food.

Whilst they were getting the boat ready in this manner, we would occasionally take our guns and go over to see them, and encourage them in their undertaking.

These two men had lately come from England, and Mr. H., meeting with them at Philadelphia, gave them £50 currency for their service for two years; and they were now going down with him to help him to form his settlement on the Miami river; they had got their wives with them, which, together with another person and Mr. H. (seven in all), formed our whole company. But, what is very remarkable, and what may never happen to seven other people who were travelling near four thousand miles from their country, we happened to be all English. This made it very pleasant, as in this distressing situation in which we were, even to talk of England afforded us pleasure; and it was a conversation in which we could all *feelingly* join; for in the wilds of America, all distinctions of rank are necessarily laid aside.

Those hours of the day which were not engaged in hunting, we used to employ in some useful or amusing manner; for even in this lonely place, if there is any disposition to be active, there are abundant opportunities of exercising both the body and the mind. In the first place, then, seeing a number of sugar-trees in the neighbourhood, and this being the right season of the year for it, we set about making some sugar. This was an article we wished for very much, as we had both tea and coffee with us, but could not make use of them for want of this article; and in this we happily succeeded far beyond our expectations. The sugar maple (the *Acer Saccharinum* of Linnæus) grows in great abundance in all the western parts of the middle states of America. The upper counties of the state of New York, and the western counties of the state of Pennsylvania, and all the parts bordering on the Ohio, produce these trees in the greatest abundance. They are gene-

rally found on the richest land, and frequently in stony ground, and mixed with the beech, ash, cherry, elm, oak, cucumber, and other trees; though sometimes they will cover six or seven acres in a body, with very few trees of any other sort interspersed with them. When they are found in this manner, they are called sugar groves, which is a term applied to any place of this kind where the process of making sugar from the trees is carried on.

It has been observed that springs of the purest water are in great plenty where these trees abound, so that it is almost a sure index of a desirable* situation for a plantation. I have seen them from six inches to near three feet diameter, though two feet is the common size for a full-grown tree; and their height is from 100 feet upwards. In the spring, ere they show a single leaf, they put forth a beautiful *white* blossom. The colour of the blossom distinguishes it from the *Acer Rubrum*, or the red maple, which puts forth a blossom of a red colour. The method of getting the sap from these trees, (for it is from the sap that the sugar is made), is by making an incision into the substance of the tree; and this is generally done either with an axe or an augur, though the latter is the preferable method. If it penetrate but a quarter of an inch, it is sufficient to cause the sap to ooze out at the incision, though not in any great quantity; and any incision made in this way to obtain the sap, is called *tapping* the tree. It is remarkable, that the trees are not at all injured by tapping; on the contrary, the oftener

* It is a well-known fact, that the Americans judge of the quality of land when they are in the woods from the kinds of trees which grow on it. Thus maple, hiccory, buck-eye, &c., indicate the richest soil.

they are tapped, the more syrup and of a better quality is obtained from them : in this respect they follow a law of animal secretion. A single tree has not only survived, but flourished, after forty-two tappings in the same number of years. (See "Amer. Phil. Trans.") The effects of a yearly discharge of sap from the tree in improving and increasing the sap, are demonstrated from the superior excellence of those trees which have been perforated in a hundred places by a small woodpecker. The trees after having been wounded in this way distil the remains of their juice on the ground, and afterwards by the action of the sun and the air on the juice whilst trickling down the tree, it turns the bark of a black colour ; and this blackness is always a sure sign of a good tree ; for, owing to the causes above mentioned, the sap of these trees is much sweeter to the taste than that which is obtained from trees which have not been previously wounded, and it affords more sugar. The wood of the sugar-maple is exceedingly inflammable, and is preferred on that account by hunters and surveyors when they make a fire in the woods. Its ashes afford a great quantity of potash, exceeded by few, or perhaps by none, of the trees that grow in the United States. The tree is said to arrive at its full growth in about twenty years, though its existence is supposed to be as long as the oak or any other tree.

The most preferable method of tapping the trees, and which is the one we practised, is to bore a hole with an inch augur, and about an inch deep, in a declined direction, so that there may be a kind of cup formed for the sap to lie in ; then to bore another hole with a gimlet in a horizontal direction, about the size of a quill, to enter at the bottom of this hollow cup, in which a reed or any

hollow instrument may be inserted, to carry the sap from the body of the tree, and to cause it to fall into a trough placed underneath. If the tree be large, three or four taps may be inserted in one tree. If the weather be very favourable, the sap will run in a small stream from the end of the reed, but generally it will only drop in very quick succession; and it will be found necessary every two or three days to make the tapping a little deeper, in order to increase its produce.

The season for tapping is very early in the spring, and may be easily determined by making an incision through the bark with an axe; for if it be the season, the sap will almost immediately follow the axe. Warm days and frosty nights are the most favourable to a plentiful discharge of the sap; and in this case the discharge is always suspended during the night, and renewed again as soon as the sun has warmed the trees, and then continues running all day till sunset; when, if the weather be cold, it ceases, but if otherwise, it will continue running all night; and, in this case, it is said to indicate a change of weather; in fact, we generally * found it so. The quantity obtained from a single tree depends, in a great measure, upon its size, as well as upon the weather, varying according to these circumstances from a pint to five gallons. Mr. Low informed Mr. Noble, (see "Amer. Phil. Trans.,") that he obtained near twenty-three gallons of sap in one day (April 14th, 1789) from a single tree which had been tapped for several successive years before.


* Imlay takes notice that the discharge of the sap might be of service in ascertaining the changes of the weather, having seen a journal wherein it was particularly noted, together with the variations in the atmosphere. (See Imlay, p. 146, note.)

Such instances, however, of a profusion of sap in single trees are very uncommon. I have been informed, that a moderate-sized tree will yield during the season, which is about six weeks, from forty to fifty gallons of sap, from which may be made about six or seven pounds of excellent sugar. The method we took to preserve the sap and make the sugar, and which is the method generally pursued in this western country, is to place a rough wooden trough (made out of any of the trees which grew in the neighbourhood) under each tap. These troughs may hold about a gallon; and if the trees run fast, we go three or four times a day and empty the sap from these troughs into a large kettle which we carry round; and after having gone round to all the trees, (which is no great distance where there are plenty of them,) we place this kettle over a fire, which is made nearly in the centre of the sugar-grove, and boil it down till it becomes pretty thick; then if the white of an egg, a little lime, or any other article of this kind which is used by sugar refiners, be put to it, and it be suffered to stand for twenty-four hours, all the gross particles will fall to the bottom, and the pure liquor may be poured off into an iron vessel, which must be suffered to boil over the fire till it be fit to grain, which is easily determined by trying whether it will rope betwixt the finger and thumb: if it will, it must then be taken off, and stirred incessantly till the grain can be felt, when the whole process is over, and your sugar is made. And in this manner did we make as excellent and as well-tasted sugar as any I ever tasted in my life. It has a flavour which distinguishes it from the West India sugar, and which, in my opinion, is very pleasant; and in point of colour I think it surpasses it. It

takes about six or seven gallons of sap to make a pound of this sugar, and the sap should not be kept longer than twenty-four hours before it is boiled.

The season of sugar-making is a very busy time in those parts where these trees are plenty ; it furnishes employment for every branch of a family ; and that, happily, at a season when they are not otherwise employed on their plantations. It employs them night and day ; for in the daytime they are busily employed in collecting the sap as it runs from the trees, and during the greater part of the night in boiling this sap down to its proper consistency. The children are equally useful in this office with the men ; for whilst the latter are doing the laborious part of the undertaking, the children are employed in graining the sugar, and watching the kettles. However, though the process of sugar-making is so simple and easy, yet I never could find any sugar down the river but what was coarse, and of a dark brown colour, and so hard, that it looked like a lump of bees' wax. I mean such as is offered for sale ; for people on their own plantations must be negligent indeed, if they do not produce sugar of a better quality than that.

During the little time we were here we made near 20 lbs. of sugar, which (considering the earliness of the season, and the few trees we had tapped, and the inconveniences we lay under) was very considerable. Another mean too, of employing our time (at least that of H. and myself) was by surveying, and laying out imaginary tracts of land. We had got a Gunter's chain with us, and also a compass, out of which I made a *circumferenter*, and with this we used to survey and make plans of the country ; and with this, by measuring a line on



the banks of the river, we found by trigonometry the width of the Ohio where we were to be 1,208 feet ; and we had an opportunity of verifying this calculation, by actual measurement, when the river froze over again.

H. had also some books with him, which was another source of amusement during those times when the weather prevented us from going out, or after our return home ; but in this we were limited for time ; for when the sun set all our means of reading departed, as we had no candles. This had one good effect upon us, that it obliged us to rise with the sun, in order that we might accomplish all we had to do by daylight. We *did* make a few candles out of the fat of some deer and some bears we had killed ; but we were obliged to be very saving of them, and use them only when there was an absolute necessity, though we kept up such an excellent fire, that there was little occasion for a candle to see our way about our hovel. Thus, when the sun was set, all our *employment* had ceased for that day ; but not our *amusement*, for we would then shut the door of our miserable hut, to keep out the chilling blast which whistled round it, and, all assembled round the enlivening fire, we would endeavour to keep each other in spirits by talking of Old England. Then it was we would compare our present situation with what we once enjoyed ; then would the presence of each of us recal to mind some of the difficulties we had lately undergone, and induce us to reflect on the dangers which we had providentially escaped ; and thus, by some kind of converse, we would endeavour to pass away the evening as pleasantly as our situation would allow, till at last our watches would summon us to rest ; then, laying our blankets and what bedding we had down before the fire,

we would sleep soundly and securely till the morning. I have oftentimes, when lying down to rest, thought how very little would suffice for man, if he were disposed to be happy therewith. If any person, when I set out on my journey, had informed me of the circumstances I was to pass through, and had related to me the situation I was now in, I should have thought it either impossible to have borne it, or that I should have been completely unhappy and miserable therein. But so soon does the mind of man accommodate itself to the trials which it is to undergo, that I declare I did not indulge one unpleasant thought, not feel myself at all unhappy, except when I reflected on my separation from my friends, and how anxiously they would wish to be informed how and where I was. In other respects we passed our time as merrily as if we had been at our own home, conscious that we could not impute to our own conduct any part of our present sufferings.

January 31st, 1797.—The river, which had been frozen up now near five weeks, broke up again this day, with a repetition of all those destructive circumstances which attended it the last time; and we had the anxiety of beholding once more its ravages. It is to be observed that the cause of the last breaking up was owing to some partial rains which fell in the upper country, and which caused the river to rise about ten or twelve feet; and when that passed off, it fell again to the depth it was before. But this was now the time of year when it was expected that the melting of the snow in the upper countries would not only break up the ice, but cause the river to rise to the level of its banks, as is customary at this season; for all the rivers in this back country are extremely low in

winter, so as even to allow cattle to cross ; and then their banks, which are from forty to sixty feet, appear like walls on each side. But no sooner does the melting of the snow cause the streams to swell, than the rivers assume a different appearance, and not only rise to the top of their banks, but sometimes overflow them ; and these streams come down in so rapid a manner, as to cause the rivers to rise ten, fifteen, and even twenty feet in twenty-four hours. Nothing can differ more than the contrast in the appearance which the same river makes at these two different seasons. In the former instance we see a broad channel from a quarter to a mile wide, bounded on each side with high banks, and with scarcely water enough in it to cover its bottom, and in many places confined to one narrow stream, and flowing with a dull and lazy current. In the latter, we see this same channel completely filled with water, and in many places overflowing its banks, and rushing amongst the trees which grow thereon, and flowing with a rapidity of five and six miles an hour, and causing every object which is floating thereon to be carried along with an astonishing celerity. This is the difference of the two seasons ; and this last was the one which was now beginning to open upon us, and of which this breaking up of the ice was the prelude. For the same waters which caused the ice to break up, raised the river to such a degree that in the course of a few days it had nearly reached the top of its banks ; and the same river to which about a week before we had to descend above seventeen yards, now flowed at our feet. We were happy to see this change in the weather, as it flattered us with a prospect of a speedy escape from this wilderness. We accord-

ingly made another visit to our men who were engaged in building the boat ; and, expediting it as much as possible, we had the satisfaction of seeing her launched on *Friday, February 17th*, and the next day,—

February 18th,—we brought her down to the place where we lay. This boat was thirteen feet wide and forty feet long, and boarded up at the sides and covered over at the top all the way, except at a place in the front, which was left for the horses, and for the men to row. It was about nine o'clock in the evening when she arrived. We had just laid ourselves down before the fire, when we heard a noise not far from the house, which at first startled us, not thinking what it might be ; but on going out, we congratulated ourselves at seeing a light on the river, from whence the noise proceeded, and we soon found that the men had brought our boat down. We went to welcome them ; and, after having made her fast we set before them what provisions we had got by us, and after making them detail the account of their proceedings, we lay down to rest, and before daylight the next morning,—

February 19th,—we got up, and proceeded to load the boat. This took us up the whole day, so that it was next morning,—

Monday, February 20th, 1797,—about ten o'clock in the forenoon, when we pushed off from the shore, and, bidding a final adieu to our old habitation, proceeded down the river on our journey. On taking leave of this spot, I could not but admire the marks of civilization we had left behind. We had cleared a piece of ground, fitted up a comfortable house, cleared out a spring that was in the neighbourhood, and left a sledge and other

things behind us, which would clearly point out to a traveller on that road, that it could not be the work of the Indians alone. The association of ideas had induced in us an attachment to this infant settlement of our own, and we kept our eyes constantly fixed on it, till a cruel bend in the river snatched it from our sight for ever. We anchored (or rather fastened our boat to the shore) about the middle of Long Reach this evening. Long Reach is the most beautiful place I ever saw in my life : the river at this spot preserves one straight course for fifteen miles, and is agreeably interspersed with a number of islands through its whole length. It runs nearly in a westerly direction, and the setting sun at the extreme end, reflecting itself in the smooth water, and beautifully tinging the distant trees, rendered it at once one of the most sublime views I ever was witness to. The river looked like a little sea of fire before us ; and, by the rapidity and smoothness of its current, seemed to be silently hurrying us on towards it. I regretted then, more than ever, the want of the pencil, and had the mortification of soon seeing it vanish from my presence for ever, except when faintly recalled by the aid of memory. We had come thirty miles to-day, and the next morning,—

Tuesday, February 21st,—about five o'clock, we started and came to Muskingham* about one. Muskingham, so called from the river of that name, at the mouth

* It was no small satisfaction to arrive at this place, not only that we might supply ourselves with those necessities of which we had been so long deprived ; but as we had been banished from society so long, the sight of a few people like ourselves gave us much pleasure ; particularly as we recollected the names of a few persons who resided here, whom we had seen at Pittsburgh.

of which it is built, consists of about one hundred houses agreeably situated on the eastern point where the Muskingham joins the Ohio. The western bank of the Muskingham rises into a very high country, forming a kind of amphitheatre from the town. The river itself is 150 (Imlay says, 200; Hutchins, 250) yards wide at its mouth; and in the Ohio, just above the town, there is a long island which divides the Ohio, and when the streams join again, makes it appear very broad from its banks; so that it is not much unlike three rivers falling into one current. About a quarter of a mile from the town are the remains of an old fort, near which are some graves nearly similar to those at Grave Creek, and from the fort to the river there is a covered way. The roads were so exceedingly bad when we were there, that I could not possibly get to them, but we could see the graves from the river. This is said to be the first settlement made by the Americans on the western side of the Ohio, in what is called the north-west territory; it was formed in the year 1787, (see Imlay, p. 20,) and has been progressively increasing to its present size ever since, though now the emigrants seem disposed to go farther down the river.

We stopped here about an hour to get provisions, and then proceeded* on our route. We did intend to put ashore about sundown, not wishing to float all night; but the stream was so rapid, that we did not dare to

* We came to the Little Kanaway about five o'clock. The Ohio makes a beautiful turn here to the right, which renders the point of land on the northern side, opposite the Little Kanaway, a beautiful situation. There are some good plantations on this spot, and we put ashore in our canoe and got some eggs and milk, which was a great treat to us. It is twelve miles from Muskingham.

venture near the shore, for our boat would have been dashed in pieces against the trees which now appeared to *grow out of the water*, though, when the river was low, they were only on the sides of the banks; and not finding any eddy into which we might row to stop the rapidity of her progress, we were under the disagreeable necessity of continuing on the river all night, which, unfortunately for us, proved one of the most tempestuous I ever experienced. The sun had scarcely set, ere the atmosphere began to be overcast, and to threaten us with a violent storm; the wind also began to increase, which rendered our situation very precarious, as these boats are very dangerous in windy weather. However, as we could not make the shore without subjecting ourselves to greater danger, we were determined to meet the worst; and, in order to be ready in case of any accident or probability of danger, we all kept watch this night, and were continually on the look out. About eight o'clock the wind began to get pretty high, and the rain seemed to descend in torrents. The night was exceedingly dark, so that we could not tell in what part of the river we were, save when the lightning broke through the clouds, kindly informing us of our situation, and seeming to roll in volumes along the stream; this, mixed with the most tremendous thunder I ever heard, resounding from the echoing woods, rendered it one of the grandest, though at the same time the most awful, sight the imagination can conceive. This continued through the whole of the night, though the wind had, fortunately for us, considerably abated; and we had the satisfaction of seeing the dawn advance, and usher in one of the finest mornings the eyes ever beheld. About the middle of the night I

was witness to one of the strangest scenes imaginable; both the novelty and the horridness of it will make so indelible an impression upon my mind that I shall never forget it. We were surprised at seeing a light at some distance before us, apparently on the banks of the river. On our nearer approach to it, we observed this fire to move in different strange directions, and for some time puzzled our imaginations in conceiving what it could be. At first we thought it might be some kind of *ignis fatuus*, produced from the particular situation of the country, which appeared to be swampy; but on our coming opposite to it, we saw distinctly the appearances of human beings nearly naked, and of a colour almost approaching to black; and each of these beings furnished with a couple of firebrands, which they held in each hand. There might be about a dozen of them, and they had got a large fire blazing in the middle of them, and were dancing round it in the wildest confusion imaginable, at the same time singing, or rather muttering, some strange incoherent sounds. Their peculiar appearance, whose effect was heightened by the contrast of the tempestuousness of the night, and the rolling of the thunder and lightning around us, put me in mind so much of the descriptions which are given of the infernal regions, that for the moment, I could not help considering them as so many imps let loose upon the earth to perform their midnight orgies; though it proved to be nothing more than a few Indians, who, disturbed by the inclemency of the weather, could not sleep, and were innocently diverting themselves with singing and dancing round their fire.

February 22nd.—This morning, about nine o'clock, the wind began to increase again, and in the course of half

an hour got so high, that we were obliged to make towards the shore, and fasten our boat to some trees on the banks. We were now ninety-four miles from Muskingham, where we were yesterday at one o'clock, having come that distance in about twenty hours, which is near five miles an hour. We went ashore here with our guns, to see if we could get any provisions, and soon brought home a couple of turkeys. We proceeded a few miles into the country, and found plenty of game and some excellent land. We also tried for some fish in the creeks we met with: we caught but few, and those of no excellent quality. We observed plenty of wild fowl, but did not think it worth while to kill them. We stopped here till three o'clock in the afternoon, when, the wind having abated, we pushed off from the shore, and, proceeding on our route, came to the Great Kanaway* about seven o'clock, sixteen miles from where we stopped. There is a settlement on the eastern side of this river, consisting of about twenty houses, and very appropriately called Point Pleasant; for though it was nearly dark when we arrived there, yet we saw enough of it to pronounce it a most delightful situation. We put ashore here to get some fodder for our horses, and some necessities for ourselves; and about one o'clock in the morning (the night being remarkably serene and pleasant) we ventured to proceed on our journey.

* The Great Kanaway is near 500 yards wide at its mouth, and is so considerable a branch of the Ohio, that it may be mistaken for it by persons ascending this river. It rises in North Carolina, and runs a course of 400 miles before it empties itself into the Ohio. Its navigation is unfortunately obstructed by a fall not eighty miles from its mouth.

About four miles below Kanaway is a settlement formed by some French people, called Galliopolis, and near which there is an island; and about ten miles farther is another island; which are the only two islands (excepting three very near Limestone) between the Great Kanaway and Cincinnati, a distance of 200 miles. At half-past nine we came to Guyandot river (forty miles). It is but a small stream, though in high water navigable for batteaux. At twelve we came to Big Sandy (twelve miles). This is the boundary of the state of Kentucky; so that, having passed this, we may consider ourselves in that famous country so celebrated by Imlay and others. At five we put ashore for the night, not wishing to proceed farther on account of the weather.

The next morning, *Friday, February 24th*, we started by daylight, and at nine we came to Tigent's Creek, which is thirty miles from Big Sandy; and at ten we came to Sciota river, (five miles,) at the mouth of which, on the western side, there is a settlement of about eighteen or twenty houses.* Here the water had risen so high, that it had overflowed the banks, and the poor inhabitants of this settlement were in the greatest distress, endeavouring to save what little property they had in their houses from the desolating fury of the flood, and putting it on board canoes and rafts, and taking it to some place in the country where the water could not reach them. We would have offered them some assistance, but we did not discover their situation till we were opposite to them; and, going with the rapidity with which we did,

* The Sciota at its mouth is about 200 yards wide, its current gentle, and navigable for nearly 200 miles, with a portage of only five or six miles to Sandusky.

it would have been impossible to have stopped our boat till we had got three or four miles below them; and then we could not have got at them, as our boat could not bear against the stream. At half-past one we were obliged to put ashore on account of the wind. The next morning,—

Saturday, February 25th,—starting about seven, we passed the salt works about eight, situated at the mouth of Saltlick Creek. This is twenty-one miles from the Sciota river, and consists of a few houses, where there are some salt works carried on from a neighbouring lick. These licks, of which there are a great number all over this western country, are nothing but salt springs, but have this peculiar circumstance attending them (from whence they derive their name) that the ground in their neighbourhood is *licked* up for a considerable distance by the deer, buffalo, and other wild animals, who frequent them at certain seasons of the year; and in such astonishing quantities, that a lick is easily found out by the road which is made by the frequent passing and repassing of these animals. Nay, Imlay says (page 323) that so great is the number of buffaloes and other animals that resort to these licks, that it fills the traveller with amazement and terror; especially when he beholds the prodigious roads they have made from all quarters, as if leading to some populous city. The vast space of land around these springs is desolated as if by a ravaging enemy, and hills reduced to plains; for the land near these springs is generally hilly. At half-past nine we came to Graham's station, on the Kentucky shore (eight miles); it may contain about twenty houses; and at ten we came to an island, to the north of which the Little Sciota comes in (two miles). About twelve we came-to, on account of the

wind ; went a shooting on the shore ; saw plenty of deer and turkeys, but had no sport. We were now got into the neighbourhood of a settled country, and the wild animals were all very shy.

Sunday, February 26th, 1797.—About six o'clock this morning we started, and in about half an hour came to two islands close to each other, and about half-past nine came to Limestone (nineteen miles from Little Sciota). Limestone is called the landing place to Kentucky ; and is generally made the resort of all the emigrants who are bound to the interior of this state. Here they land their goods and their domestic implements, whether of husbandry or of the household, and transport them to their distant settlement, in waggons which they either bring with them, or hire at this place. It may contain from thirty to forty houses, situated on the western side of the mouth of a creek, and at the bottom of a hill. There is a place about a mile above (which we passed by) called the upper landing. This was a settlement formed prior to that of the town, and was meant for its site. Here a number of boats stop to unload, owing to there being convenient warehouses and cranes ; but it has greatly fallen to decay lately. Limestone appeared to us a very dirty place when we came to it ; the houses are chiefly log-houses, and presented a much more pleasing prospect on our approach from the water than when close to it. Provisions of every kind were very dear when we were there, owing to the number of boats lately come down.

This may be said to be the first settlement in Kentucky, or rather the first place where the country begins to assume a settled appearance ; and from this place, as far down as Louisville, at the falls, which is 203 miles, the

whole southern bank of the Ohio assumes a civilised appearance, and, from the agreeable mixture of woods and plantations, forms a number of most enchanting views.

We did not stop at Limestone above three or four hours, but, wishing to pursue our journey, we pushed off from the shore about one, and after going about twenty miles, were obliged to put-to again on account of the wind.

Monday, February 27th.—We started again, at six o'clock, and about half-past three we came to Columbia, our long-wished-for port, having, through unforeseen difficulties and unavoidable delays, been six months on our journey.

We put our boat into the mouth of the Little Miami river ; and my friend H. having some business to do with a gentleman in the town, whose house was about a mile off, he took the canoe and went down to him this afternoon, and did not return till quite late. H. had purchased, in company with two other gentlemen of this place, about thirty or forty thousand acres of land on the banks of the Little Miami, and about forty miles up that river ; and he was now going to form a plantation on that land, and to encourage settlers to do the same. He was down here about a twelvemonth ago, and then made the contract. He gave Judge Symms $1\frac{1}{4}$ dollars per acre for it, payable by instalments, the first half to be paid when the deeds were delivered, and the rest at different instalments, as can be agreed upon by the parties. This is the general method of buying these kinds of uncultivated lands. H. had planned out a town which he meant to lay out, as soon as he arrived on the spot. One of his coadjutors had got the ground surveyed before ; and

there were a number of settlers going along with him to assist him. He informed me that nearly half of his land was sold, and great part of it settled ; the price he asked for it was two dollars per acre ; but it will increase in value as the settlements increase. The lots in the town which he had laid out were six dollars. They consist of half an acre of ground, and you are obliged to build a house within a certain time.

In order to found a colony at first, he holds out an encouragement to settlers by giving them a town lot and four acres of ground for nothing, except on condition that they shall build a house on the town lot, and cultivate the ground. This he does only to the first twelve or twenty that may offer themselves, and after the place is once settled it increases very fast ; for it must be observed that it is not so much the *present* advantage which land speculators look to, as the rise which is almost sure to take place in consequence of an increase of settlements ; and in order to manage this concern to the best advantage, the landholders will always take care and not sell all their lands *contiguous to each other*, but only at *certain distances*, so that the whole face of it may be cultivated, and the intermediate uncultivated parts consequently rise in value.

Tuesday, February 28th, 1797.—This morning we dropped down the river about half a mile to a convenient landing, and here we had a much better view of the town than we had where we lay last night. The houses lie very scattered along the bottom of a hill which is about one-eighth of a mile from the river. The town is laid out on a regular plan, but it was never in a very flourishing state ; the neighbouring and well-settled country round and at

Cincinnati, prevents it from being a place of any great importance; besides it lies very low, and is often overflowed from the river, which prevents any houses being built immediately on the banks, as is customary in these new settlements. One quarter of the land on which the town was intended to be laid out is now under water. Colonel Symms, one of the judges of this territory * contracted with Congress for a million acres of land lying between the two Miamis, upon certain conditions; and several thousand acres of that contract have been made over to him, and he is now arranging with Congress the stipulations of the rest. It was he who first settled this tract of country, which is bounded on each side by the two Miamis, and which a few years back was the resort of Indians and wild beasts; but now can boast several large towns and well-cultivated settlements.

After breakfast we went ashore to view the town, and H. introduced me to Mr. Smith and Dr. Bean. The former gentleman is a man of very good property, which he has acquired in several different ways in this place: he is a farmer, a merchant, and a parson; all these occupations, though seemingly so different, he carries on with the greatest regularity and without confusion. The latter is a man of good education, and practises physic here, somewhat in the same manner as our country apothecaries in England do, for which he is dubbed Doctor. As these gentlemen rank with the first in the place, a description of their habitations, manners, and society, will serve without any great variation, for that of the bulk of emigrants in a similar state of life.

* Brother-in-law to Mr. Jay, who was ambassador to England.

1 As Dr. Bean would insist upon our sleeping at his house, and in fact stopping with him altogether during our residence here, we accompanied him home. His house was built of logs, as all the houses in these new settlements are, and consisted of a ground floor containing two rooms, one of which was appropriated to lumber: the other served all the purposes of parlour, bedroom, shop, and everything else; (though there was a little outhouse, where they occasionally cooked their victuals, and also washed); and it did not appear as if it had been cleaned out this half-year. There were two windows to throw light into the room; but there had been so many of the panes of glass broken, whose places were supplied by old hats and pieces of paper, that it was very little benefited by the kind intention of the architect. I saw a few phials and gallipots on a shelf in one corner of the room, and near them a few books of different descriptions; and this I believe comprised all the medicine and knowledge he was possessed of. It seemed to me very strange that one who appeared to be a man of information should not take more pains about his habitation, and endeavour to render things about him more comfortable, particularly as it might be so easily done; but such is the force of example, that very few of the emigrants who come into this kind of half-savage half-civilized state of life, however neat and cleanly they might have been before, can have resolution to prevent themselves from falling into that slovenly practice which everywhere surrounds them; and it is not till the first class of settlers are moved off, that any of these new countries are at all desirable to a person brought up in different habits of life.

At dinner time I observed a table prepared in the middle of the room, with some knives and forks and pewter plates placed on it, but without any tablecloth ; and when the dinner was ready, two of his servants who were working out in the fields were called in, and sat down at the same table and partook of the same provisions as ourselves ; and I observed that they did not seem to treat their master or any of his company with any degree of reserve, but behaved as if they were with his equals, though without behaving at all improperly, or stepping beyond the bounds which this state of society has prescribed : they were conscious of the independence they enjoyed, and did not seem to wish to be deprived of it themselves, or to take upon themselves any unnecessary airs in consequence thereof. Our provisions consisted of some stewed pork and some beef, together with some wild sort of vegetable, which had been gathered out in the woods : as it must be observed that in all these new settlements, fresh provisions, both in meat and vegetables, are at some seasons very scarce, particularly at the time we were there. The inhabitants live a great deal upon deer and turkeys, which they shoot wild in the woods, and upon bacon, which they keep by them in case of need ; and as to vegetables, they are seldom to be procured except in summer. The bread which is made here is chiefly of Indian meal ; it is a coarse kind of fare, but after a little use becomes not at all unpleasant.

When the time drew nigh for us to retire to rest, we were shown to one corner of the room where there was a ladder, up which we mounted into a dismal kind of a place without a window ; but instead thereof, there were a number of crevices between the logs, which had

never been filled up ; and in the room there were three beds, or rather, three bedsteads, with a few blankets thrown over them : for as to beds, consisting of sheets, quilts, &c., it is a thing quite unknown here ; at least so seldom to be met with, that it is remarked as a great luxury. I could not but smile at the appearance of this *hole*, which they called a bedroom. However, as I was aware that I had a great deal of this rough kind of living to go through ere I returned to New York, I was resolved in every situation to make myself as happy and as comfortable as I could ; accordingly, I pulled off my coat, and throwing myself down upon the bedstead, wrapped myself up in the blankets ; and my companion having done the same, we put the candle out, and endeavoured to compose ourselves to sleep ; but the wind blew so strong, and there were so many holes in the room, that we were incommoded by a continual current of air the whole night. However, we got up and stopped a few of the largest of them in the best manner we could, and then slept very soundly till morning. We easily discovered *when* it was daylight ; for, though there were no windows in the room, there was not a corner that did not give us a token of the sun's having peeped above the horizon, and showed us in strong colours the miserable habitation in which we were lodged. As the morning advanced we had the opportunity of observing every crevice and corner of this filthy garret. I could not help smiling as I lay abed at the miserable hole I had got into. However, awakening from my reverie, I started up and crept out of the place, and walked out to enjoy the morning sun, and a mild atmosphere ; a contrast too great not to pass unnoticed. I went to breakfast with Mr. Smith, and here

I found things a little more in order, though far from that degree of refinement and comfort to be met with in the more civilized parts of this country. This house bore the marks of industry and cleanliness, and we were regaled with tea and coffee and a boiled chicken for our breakfast, attended with buck-wheat cakes, which are common in this part of the country. I have observed that this gentleman supported the characters of a merchant, a farmer, and a parson: the gravity of his countenance seemed to indicate the latter, and it is a thing not very uncommon to be met with. For, in these half-settled countries there is no regular religious society, but some one amongst the rest, either remarkable for his powers of oratory, or a well-spent life, takes upon him the office of minister; and, as occasion serves, goes a short distance into the country, where the inhabitants meet at each other's houses. The farm of this gentleman consists of several acres of land adjoining his house, which he keeps in high cultivation; chiefly meadow-ground, and from which he has realized a great deal of money. His warehouse was near the water-side. It consisted of but one room, where he brings down the river such articles of European manufactory as are most in demand. There are but two or three other stores of the same kind in Columbia. The profits of this trade are generally 100 per cent., and sufficiently compensate the trader for the trouble of a journey once or twice a year to Philadelphia.

The inhabitants of this place depend chiefly on their own land for the necessaries of life: they raise corn and cattle sufficient generally for their household. Those articles which I had an opportunity of inquiring the price of were:—flour at 8 dollars per barrel; whiskey,

1 dollar per gallon ; Indian meal, $\frac{1}{2}$ dollar per bushel ; potatoes, 1 dollar per bushel ; bacon, $\frac{1}{8}$ dollar per lb. ; the hire of labourers, $\frac{1}{2}$ dollar per day, and their board found them. Some of these prices were rather high, owing to the river having been so long stopped up ; and it must be observed, that the people situated on the banks of the Ohio depend very much upon the boats which, coming from the upper and more settled parts of the country, bring with them many articles of use and luxury. Some lots in Columbia sold lately for thirty dollars. We did not stay here longer than we could help ; for H. wished to be starting for his settlement, as a number of settlers had met him here, and wanted to go with him, in order to get their plantations ready against the summer. Accordingly, as soon as he had housed his goods and sold his boat, he hired two waggons to take up such household goods and implements of husbandry as he might be in immediate want of. The place where the town was laid out was between forty and fifty miles off, and lay for the most part amidst a desert wilderness, where no waggon had ever approached ; in fact, where none but Indians and hunters had ever frequented. I cannot but say that this opportunity of exploring an unknown country, and of being one amongst the first to found a new colony in an uninhabited place, and to be witness to the first essays of a rising people, gave me a secret pleasure and satisfaction ; and I was amongst the most forward to get myself ready upon such an occasion. We had agreed that the waggons should precede us a couple of days ; and then we should be able to overtake them nearly at the end of their journey, and assist them if there were any need. Accordingly,—

Saturday, March 4th, 1797,—the two waggons started, accompanied with a guide to conduct them through the wilderness, and three or four pioneers to clear the road of trees where there might be occasion ; and on

Monday, March 6th,—Dr. Bean and myself started about noon, accompanied by several others in the neighbourhood ; some of whom were tempted by curiosity, and others with a prospect of settling there. We were mounted on horses, and had each a gun ; and across our saddles we had slung a large bag, containing some corn for our horses, and provision for ourselves, as also our blankets : the former was necessary, as the grass had not yet made its appearance in the woods. We kept the road as long as we could ; and when that would not assist us any farther, we struck out into the woods ; and towards sundown found ourselves about twenty miles from Columbia. Here, having spied a little brook running at the bottom of a hill, we made a halt, and kindling a fire, we fixed up our blankets into the form of a tent, and having fed both ourselves and our horses, we laid ourselves down to rest ; one of us, by turns, keeping watch, lest the Indians should come and steal our horses. The next morning,—

Tuesday, March 7th,—as soon as it was light, we continued our journey, and towards the middle of the day overtook our friend H., almost worn out with fatigue. The ground was so moist and swampy, and he had been obliged to come through such almost impassable ways, that it was with difficulty the horses could proceed ; they were almost knocked up ; his waggons had been overturned twice or thrice ;—in fact, he related to us such a dismal story of the trials both of patience and of mind

which he had undergone, that I verily believe if the distance had been much greater, he would either have sunk under it, or have formed his settlement on the spot. We encouraged him with the prospect of a speedy termination, and the hopes of better ground to pass over ; and with this his spirits seemed to be somewhat raised. We all encamped together this night, and made ourselves as happy and as comfortable as possible. My friend H. seemed also to put on the new man ; and from this, and from his being naturally of a lively turn, we found that it was a great deal the want of society which had rendered him so desponding, and so out of spirits ; for after we had cooked what little refreshment we had brought with us, and finished our repast, he sang us two or three good songs, (which he was capable of doing in a masterly style,) and seemed to take a pleasure in delaying as long as he could that time which we ought to have devoted to rest. As to my own part, I regarded the whole enterprise in a more philosophic point of view ; and I may say with the Spectator, I considered myself as a silent observer of all that passed before me ; and could not but fancy that I saw in this little society before me the counterpart of the primitive ages, when men used to wander about in the woods with all their substance, in the manner that the present race of Tartars do at this day. I could not but think that I saw in miniature the peregrinations of Abraham, or Æneas, &c., &c.

The next morning, *Wednesday, March 8th*, by daylight, our cavalcade was in motion ; and some of the party rode on first to discover the spot, for we were travelling without any other guide than what little knowledge of the country the men had acquired by hunting

over it. I could not but with pleasure behold with what expedition the pioneers in front cleared the way for the waggon : there were but three or four of them, and they got the road clear as fast as the waggon could proceed. Whilst we were continuing on at this rate, we observed at some distance before us, a human being dart into the woods, and endeavour to flee from us. Ignorant what this might mean, we delayed the waggons, and some of us went into the woods and tracked the footsteps of a man for some little distance, when suddenly a negro made his appearance from behind some bushes, and hastily inquired whether there were any Indians in our party, or whether we had met with any. The hideousness of the man's countenance, (which was painted with large red spots upon a black ground,) and his sudden appearance, startled us at first ; but soon guessing his situation, we put him beyond all apprehension, and informed him he was perfectly safe.

He then began to inform us that he had been a prisoner amongst the Indians ever since the close of the last American war ; and that he had meditated his escape ever since he had been in their hands, but that never, till now, had he been able to accomplish it. He asked us what course the nearest town lay from us ; and after telling him, he said that the Indians no doubt were pursuing him ever since they had missed him, and that he intended to escape to the first town for protection. He said that they had used him remarkably well ever since he had been with them, treating him as one of their own children, and doing everything in their power to render his situation comfortable. They had given a wife, a *mother*,* and

* It is their usual practice to put white people (whom they

plenty of land to cultivate if he chose it, and the liberty of doing everything but making his escape. With all these inducements, he said he could not give up the idea of never seeing again those friends and relations whom he left in his early days. This man, when he was taken prisoner, was a *slave* to a person in Kentucky; and though amongst the Indians he enjoyed liberty and all the comforts which can be expected in a state of nature, and which were more (I may safely pronounce) than when he tasted of the bitter cup of slavery, yet was this man, who so lately enjoyed all these blessings of Heaven, going to render himself up a voluntary slave to his former master. For what? That he might there once more embrace those friends and relations from whom he had been so long separated.

We could not but look upon the man with an eye of pity and compassion, and after giving him something to pursue his journey with, and desiring him to follow our track to Columbia, we separated. At about three or four o'clock the same afternoon, we had the satisfaction of seeing the Little Miami river. Here we halted, (for it was on the banks of this river that the town was laid out,) and we were soon joined by our other companions, who had proceeded on first, and who informed us that they had recognised the spot about half a mile higher up the river. We accordingly went on, and got the goods all out of the waggon that night, so that they might return again as soon as they thought proper. And here we could not but congratulate our friend H. upon his arrival at the seat of his new colony. He appeared wish to encourage to come among them) under the protection of some matron, who is called his mother.

heartily glad that his journey was at an end, and he seemed to eye the ground and the country about, with that degree of secret pleasure which a man may be conceived to take in viewing a spot which, in point of cultivation, was to be the work of his own hand. He seemed to anticipate his labours, and fancied he saw fruitful cornfields and blushing orchards in every object he beheld, and expressed a secret satisfaction in thinking he should end his days in this delightful country.

The next morning nothing was to be heard but the noise of the axe resounding through the woods. Every one who was expert at that art was gone out to cut down trees to build our friend a house, and before night they had got several of the logs laid and the house raised several feet. They all joined cheerfully at this work, but then it was expected that our friend should not deny them the use of the whiskey barrel in the meanwhile, which makes it come as expensive as if you were to hire so many men to do it for you; and all this boasted friendship which is shown upon such occasions, is (as Rochefoucault expresses it) mere barter; for it is expected that you will do the same in your turn for any one of them when he is in need. They are obliged to have recourse to these mutual aids and assistances, as they cannot procure sufficient labourers without. It is, therefore, a virtue arising from necessity.

Whilst the major part were engaged in this necessary employment, Dr. Bean and myself and two of the men took our guns and a couple of axes, and went a bear-hunting. We had discovered marks of several in coming along, and we were now going to see if we could not shoot some of them, in order to furnish ourselves with

provisions. The method of taking them at this season of the year is this. It is well known that at the approach of winter the bears climb up to the top of some lofty tree which is hollow at top, and creeping backwards into the hole, sit there upon their hinder parts till spring, without any other sustenance than what they procure from *sucking their paws*. It is easily discoverable whether any tree has these holes in it; and it may also be easily ascertained whether there is reason to think there is a bear in it or not; for in climbing up the trees they scratch off the bark in such a manner, as to leave an indelible track through the whole winter. When, therefore, the hunters have found one of the trees in which they imagine a bear to be lodged, they set about cutting it down, which those who are used to it will very soon do; and three or four of the party with loaded rifles will plant themselves at a little distance off, and in the direction where they expect the tree to fall. As soon as the tree comes to the ground, *bruin* starts from his hiding place, and endeavours to flee into the woods; but the person who stands nearest to the course which he is going to pursue immediately aims his piece, and most probably kills him; however, if he should only wound him, the bear will generally turn upon his attacker, and in this case the others come to his assistance, and put an end to the contest by shooting him through the head.

This being a new species of diversion to me, I embraced with pleasure the opportunity of going with them to enjoy it. We had not proceeded far in the woods, ere we discovered a hole in the top of a lofty oak, whose diameter was upwards of three feet at the bottom, and its height near 150 feet. These immense trees are generally those

which the bears fly to: in fact, no others of a smaller size could contain them at the height of sixty or seventy feet from the ground. We saw evident traces of his claws impressed on the bark of the tree, and it was soon resolved that the tree was to come down. Accordingly our two men set at it, and when they had nearly got through it, we took our appointed stations to watch the egress of this tyrant of the woods. In a short time the immense trunk began to give way, and, carrying all the lesser trees before it, fell with a tremendous crash upon the ground. Bruin, finding his habitation in motion, began to look out before it reached the ground, and with a sudden spring arrived there first. Immediately Dr. Bean levelled his piece, and shot him through the body, but only so as to wound him, and the bear began to turn upon him; when, at a lucky moment, a limb of the tree fell upon the stump of his tail, and left him struggling to get free. This afforded me time to come round to Dr. Bean's assistance, when I shot the poor animal through the head, and put a period to his existence. After that we left him to the men to carry to our camp, whilst we went to discover the haunts of some others; and in this expedition we killed two or three deer, and saw great quantities of wild turkeys; so that we had not any prospect of extreme want whilst we were here. After this we returned home, and received the thanks of our party for supplying them so sumptuously with provisions.

This diversion I pursued as often as the weather favoured, almost every day I was here. Sometimes I would wander out by myself for several miles in the country, and not return again till the setting sun would close the day. I had by this time acquired the *habit* of wandering out in

the woods, and imperceptibly preserving the course in my own mind, without any fear of mistaking my way. A habit it certainly is, for it can only be acquired by frequent and constant practice. And in this respect an Indian is far superior to any surveyor: for here the trigonometrical principles of the latter would be of no service to him unless he could clear the way before him; and without this aid, the former will conduct you from any one part of the country to another with an astonishing degree of exactness, even if he had never been over the ground before, in the same manner that an old inhabitant will go through all the little streets and intricate windings of a large and populous city without any fear of being lost or misled.

In these excursions I had opportunities of observing the quality and situation of the land which my friend had purchased; and as that tract of country which lies between the two Miamis is nearly equal in point of fertility, &c., through its whole extent, perhaps a description of this will serve for a description of the whole. It must be observed also, that this tract of country lying between the two Miamis is the only properly *settled* country on the north side of the Ohio; for though there are a few scattered plantations along the banks of the Ohio, and on some of the rivers which run into it, yet they are too widely diffused to assume any corporate form, or to vie with each other in a spirit of industry and civilization. This little Mesopotamia, then, may be said to be the principal attracting point of the whole north-western territory; and it is a place where, above all others, I should fix my residence, if I were at all disposed to emigrate to this western country.

This tract of land, I have already remarked, was first settled by Colonel Symms. The settlements first began upon the Ohio, at a place called Cincinnati, about six miles below Columbia; this is now a large and populous town, as I shall have occasion by and by to mention. They then spread themselves to the right and left, along the banks of the Ohio, and afterwards they began to increase, and advance higher up the country, still keeping principally upon the banks of the two rivers; and my friend H. had bought some land quite on the frontiers of the settlements, though, since he had purchased, others had still advanced beyond him; and in a few years I have no doubt but that the whole country will be settled. The whole country is laid out in lots of six miles square, which are called townships, and these lots are subdivided again into thirty-six lots of one mile square each; and in Colonel Symms' contract with Congress, the latter has reserved a right to five lots (each one mile square) in every township, and also to some whole townships, to be at its own disposal at any future time. The same policy dictated this to the nation which influences individuals in the sale of *their* lands; for it will be observed, that these reserved uncultivated lots of the United States, will be continually rising in value by the improved state of the surrounding cultivated ones, and that without any detriment to the proprietors of the other lots. This is accumulating an interest in landed property at very little expense, and at some future time they may be of some essential service to the community at large; for they are reserved for the ostensible purpose of endowing schools or other institutions of public utility and advantage.

But to come to the description of the country. In our

route from Columbia to this place we passed over an excellent tract of land, which was in general too rich for wheat ; and in many places (particularly on the banks of any stream of water) it partook of the nature of the finest garden mould, and appeared as black as on the immediate borders of a coal mine. This is what is called in this country "first-rate land." The upper parts were of a kind somewhat inferior, but still preserving the title of "first-rate," and seemed more adapted than the lower lands for the production of wheat and other grain. I saw very little which came under the denomination of "second-rate land," which is rather a disadvantage in this part, where the land is of such an excellent quality, as a spot of a lower rate would be useful on many occasions. The face of the country is agreeably interspersed with hill and dale. The general appearance and description of it is as follows :—

Immediately on the banks of the river there is a fine rich bottom containing abundance of grass and very few trees ; for the soil is of so excellent a quality as to be unfit for the growth of any large plants, and it is for this reason that no underwood or bushes grow in these bottoms ; so that the general appearance, in a state of nature, is not unlike that of a rich orchard, if you could but fancy the trees to bear fruit. This level tract is of different widths, and varies from a few feet to as many miles, and is terminated by the river on one side, and on the other by the high country, or what is here called the "second bank ;" and this second bank subsides into a plain country, except where it is excavated by any running stream attempting to disgorge itself into the river, or by any accidental rising or declivity in the ground itself.

This is an observation which may serve generally for the whole face of this western country, and is what I remarked before. These second banks are emphatically called the "uplands," and the others are styled* the "bottoms."

It will easily appear that the uplands nearly in the centre, between the two rivers, must be more level than the same uplands immediately at their termination on the bottoms. Those little streams which rise in the high country between the rivers flow for some distance ere they form any deep cavities in the ground ; but as they approach the river, and begin to be carried off the uplands, they form deep channels for themselves, and divide the country into ridges. I have often remarked this when I have been out a hunting, and passed the line which appeared to bound the rising of these streams, *i. e.* that spot where the streams arising from nearly the same place, and taking different directions, the one would flow into the Great Miami, on the westward, and the other into the Little Miami, on the eastward. Here the face of the country was rich and level, and abounding with plenty of water ; but on following any of these streams either way, it became to assume a more uneven appearance, and to afford a more agreeable diversity arising from that inequality. I have sometimes come upon these streams which have formed a cavity in the ground of fifty, sixty, or seventy feet deep, with banks almost perpendicular ; and when I have descended to the bottom, in order to mount the other side, the stream has been so narrow and shallow that I could cross it with ease,

* These bottoms are often liable to be partially overflowed in rainy seasons.

so that a little brook will form an almost impenetrable barrier between two adjoining tracts of country.

The natural productions of this country, in these fertile parts, are nearly the same as land of equal quality generally does produce. The woods all over this western country produce a variety of spontaneous kinds of grass, some of which grows three or four feet high, and affords nourishment for the cattle, which the settlers let loose to graze thereon. They also abound in a variety of natural flowers and herbs, which at the approach of spring regale both the eye and the sense of smelling with the most agreeable diversity and profusion. There are also to be found a number of wild fruit-trees, such as gooseberry, plum, cherry, grape, apple, and many others. But the chief beauty in this way to the settler is the variety and size of the timber, which is plentifully scattered over the country, and consists of oak, maple, beech, button-wood, dog-wood, buck-eye, walnut, hiccory, and many others, which are only to be found in the first-rate uplands and bottom lands. I have seen oak-trees, and those not uncommon, which measured near four feet diameter at the bottom, and which had a straight trunk *without a single branch* for seventy feet ; and from that part to the termination of the upper branch it has measured seventy more ; and these immense trees I have seen cut down for the sole purpose of making a few shingles from them to cover a house with ; and even for the sake of killing a poor bear who had taken refuge therein against the inclemency of the weather ; and even for less than that : I have often seen them set on fire merely to dislodge a paltry raccoon !

Having given a general description of the face of this part of the country, and seen that it is excellently

adapted for all the purposes of the farmer, both as being well suited for the productions of nature, and for an easy method of conveyance to other parts, thereby affording a mean of disposing of those productions, I shall now attempt to give you an idea of the little town which my friend has laid out here. Its situation is on the brow of the second bank, which at this place is not many feet from the edge of the river, which flows with a gentle current, and in a beautiful meandering course, at the foot of the town. The second bank is here formed like a semicircle, the projecting part of which faces the river, which preserves a similar course. In the front of this spot he has fixed his own habitation ; and he intends throwing several of the front lots into gardens, so that the view of the river may not be obstructed from the houses in the rear. The opposite shore consists of a beautiful rich bottom, extending a great way into the country.

The town* he had laid out at right angles, nearly on Penn's plan, with a square in the middle, which he told me, with a degree of exulting pride, he intended for a court-house, or for some public building for the meeting of the legislature ; for he has already fallen into that flattering idea which every founder of a new settlement entertains, that his town will at some future time be the seat of government. He also described to me, and walked over, the ground where he intended to make his gardens, his summerhouse, his fishpond, his orchard, &c. ; and, anticipating a few years, showed me where there was to be a serpentine walk, then a seat, then a shady bower ; and, in the heat of his imagination, I believe he was as happy as if he saw them all before him. Whereas, for myself,

* It is to be called Waynesville, in honour of General Wayne.

not being so interested in it, I could behold nothing but a wild uncultivated country, full of lofty trees and prickly shrubs ; and when he showed me his fishponds and his serpentine walks, I could only discover a little standing water, and a few deertracks.

After being here a few days, I observed this wilderness begin to assume a very different appearance ; for, after having built my friend a house, the settlers had set about their own plantations, and in a short time I saw quite a little town rise from the desert ; and in several places gardens were actually laid out, and the walks formed. I could not but be pleased at this early fruit of their industry, and seemed to have a secret inclination to stay and cultivate the ground with them. I wished very much to anticipate a few years, and take a prospective of the future prosperity of this little colony,—when promiscuous society and uncouth habits had given way to more refined and polished manners ; and when the first class of settlers had moved off, and a more civilised race had succeeded. Then to have sat down upon the bench at the evening sun, and told one's children how we raised this flourishing settlement from the howling wilderness ; and to have run through the different scenes and difficulties which we encountered in endeavouring to accomplish our end ; and still to have looked forward to a more remote period, when this work of our hand might become renowned either for its splendour, or for the prowess of its inhabitants ;—I say, to have dwelt upon these points, would have afforded the mind the highest satisfaction and pleasure, and would sufficiently have compensated for those other difficulties we met with in the first process of our undertaking.

Friday, March 31st, 1797.—I had been now with my friend near a month, during which time I had an opportunity of observing the steps which are taken in first settling a country. It opened quite a new field to me, as it must to every one who has never been witness to it. It was also of service to me in another respect, that I might ascertain with what difficulties a person undertaking an enterprise of this kind had to encounter; and whether it were an object worth pursuing, if a person were disposed to turn farmer. It must be well understood, that if a person who has bought a large tract of uncultivated land wishes to enlist himself among the first settlers on it, (in which he will certainly find his advantage,) he must put up for some time with the loss of an enlightened and refined society. He must expect to meet a race of people rough in their manners, impatient of restraint, and of an independent spirit, who are taught to look upon all men as their equals, and no farther worthy of respect from them than their conduct deserves. These men are tempted to come and settle amongst you from the inducements you hold out to them; for the first settlers generally have their land given them, on condition that they will cultivate it; and they are a race which delight much to live on the frontiers, where they can enjoy undisturbed, and free from the control of any laws, the blessings which nature has bestowed upon them. As soon therefore as plantations begin to multiply around them, and an increase of inhabitants begins to deprive them of these blessings, they sell their little possession, and with the money arising from it they stock themselves with clothes and other necessaries, and move off to cultivate some other part.

It is then that the second class comes on, who are generally of the same wandering disposition as the former, but a little more refined in their manners, and submitting with a little more decorum to the authority of laws, and demeaning themselves with a more becoming behaviour to the society in general which surrounds them, though still preserving that unconquerable principle of independence and equality which is naturally attached to Americans in general, but more particularly those who inhabit these western countries. However, it is not till the third class succeeds that you meet with any kind of society that is at all desirable, and which you meet with in the more settled parts of the Atlantic states. Here it is that you may begin to look for the true character of the people with whom you are to reside, and from this you may begin to date your prospect of an enlightened society. The rapidity with which these different tribes move off depends upon the advances which are made in the neighbouring settlement. In some places it may not be many years ; in others, where the progress of improvement is slow, they may reside for a generation or two. So that this would be an inducement to fix upon a spot to which a spirit of emigration was tending, in order to get rid of these half savages as soon as possible.

If any one, then, can put up with this loss of society for a few years, and would wish to fix his residence amongst the first inhabitants, he ought to choose out a spot where he can fix a mill, as this is a thing indispensable in a young country ; he ought to build both a grist-mill and a saw-mill as soon as he has built himself a house ; and for a few years he must expect to reside in a very

rough kind of mansion, as there will be too many things of consequence to attend to, before he thinks about beautifying his house, or in fact, of even building one which is at all comfortable. He must be content with a log-house for the first few years, consisting perhaps of only one room (or two at the most) which must serve him for all purposes. But when he has finished his saw-mill, and has got things a little in order about him, he begins then to think of erecting* himself a *frame-house*; if the habit of negligence and carelessness (which is too often the case) has not taken too deep root, and rendered him indifferent about the comforts and conveniences of life; and disposed him rather to spend the remainder of his life in filth and disorder, than be at the trouble and expense of providing himself with a cottage, which he might fit up and beautify after his own taste and fancy.

When once a town is settled in this way, its rapidity towards greater improvement and perfection is very great; and it is astonishing to observe the vast progress made in the arts of cultivation and civilization all over this western country; and I have no doubt but that this town, at the foundation of which I have just been witness, will at some future period make a great figure in the history of its country.

With respect to the laws which govern this part of the country, it must be observed, that they are included in the general code adopted for the administration of justice in the north-west territory. The north-west territory is all that tract of land which is bounded by the Ohio on the south, the Mississippi on the west, the lakes on the

* A *frame-house* is one built of *sawed* wood: the timbers of the log-houses are only *hewn*.

north, and the western boundary line of Pennsylvania on the east ; and at the close of the American war was ceded to the United States by the state of Virginia, to whom it originally belonged, as a mean of defraying the expenses of the continental war. However, it must be observed, that the Indian title to these lands is not wholly extinct, as they possess in full right and sovereignty all the lands to the north-west of the Wabash river, and the country immediately bordering upon Lake Erie, which lies between that lake and the heads of the Miami, Sciota, and Muskingham rivers ; and from the policy which the United States are pursuing, there is every reason to expect that the Indians will never more have reason to reproach the white people with unjust encroachments on their territory. Congress have found it to be much more beneficial and advantageous to *purchase* what land they may want, than to attempt to force it by the *sword* ; and they are pursuing a system of moderation and amicable treatment towards them, which it is hoped will be followed with beneficial consequences, and tend to eradicate the scourge of war from their frontiers. The great cause of so many quarrels with the Indians has been, that the latter have always looked upon the attack of individuals as expressive of the disposition of the whole nation ; and not unfrequently have private quarrels been the cause of shedding much blood. And it is worthy of remark, that the most violent prejudices exist on both sides, between the Indians and those white people who live on the frontiers of the United States : so much so, that I have heard them talk with the same unconcern of killing an Indian, as of killing a deer or a turkey ; and with a savage exultation they would mimic him in his dying

agonies ; and I would venture to pronounce that it would be impossible to find a jury in the back parts of America, who would bring any one in guilty of murder, for causing the death of an Indian.

Having, as I observed before, been with my friend here near a month, I began to think of leaving him, and pursuing my journey down the river. It was my intention to go down the Ohio and Mississippi to New Orleans, a city in the Spanish dominions, in the province of Louisiana, and near the Gulf of Mexico, and from thence to return to New York by sea. A long voyage was now before me ; and as I did not know what impediments or delays I might meet with in the course of my journey, I determined upon taking the early part of the spring, that I might have the whole summer before me. Accordingly, as H. was going to Columbia this morning (*March 31st.*) I determined upon accompanying him, and of bidding adieu (perhaps for ever) to this little society, of which I had seen the first rise, and to those habitations, which I had observed, as it were, to spring from the ground. Furnishing ourselves therefore with a little provisions, and mounting our horses, about ten o'clock this morning we struck into the woods, and made the best of our way towards the town. We kept for the most part the road we had pursued in coming here, except where we were induced to deviate, in order to obtain a view of the country, or to avoid many* bad places, which the late rains had caused. In

* And here we saw several of the remains of those fortifications described in my journey to Grave Creek : many of them were not larger than what might be supposed to suffice for the protection of a single family, and appeared from their situation to have been intended for such. I could not help thinking that we were probably

this excursion I could not but observe the great difference which nature presented to our view, from the appearance which she wore in our journey hither. The spring had been very late, and the iron bands of winter had scarcely been broken; and though the weather was mild, nature had not sufficient time to show herself in her liveliest colours; but now, every plant seemed to vie with others in luxuriancy of dress and brilliancy of appearance; the earth had sent forth a thousand prisoners, who seemed to animate the eye of the beholder at their escape from the cruel hand of hoary-headed winter.

Those who are fond of a country life, and have a taste for the beauties of nature exhibited in this early part of her executions, cannot but feel the pleasure induced by so animating and divine a display of her powers; and to attempt a description of them here would be depriving her of all the merit to which she is so justly entitled. We pursued our journey through this delightful country as expeditiously as we could, in order that we might be able to reach Columbia the second day. About one or two o'clock, having come to a delightful spot surrounded by lofty trees, (all of which were in full bloom,) and furnished with a carpet which nature had decked with her most luxuriant colours, through which ran a rivulet as clear as the purest crystal, we agreed to halt; and, taking our bags from off our horses, we began to feed riding over the ashes of a race of men more advanced in what is called civilization than the present race of its inhabitants; and who, if they could peep from their graves, would probably wonder at the wilderness to which the works of their hands had been reduced by the destroying hand of Time; and would probably shed a tear to see their once-favoured spot the habitation of wild beasts, and of men more savage than beasts.

both ourselves and them with the provisions we had taken with us, which we moistened with the water of this gentle current. The sun shone beautifully bright, and the atmosphere was without a cloud; and, as our horses required a little rest, we tied them to a tree and wandered out in the woods, in order to enjoy this sweet present of nature, wherein every step we took afforded new beauties, and where we could have dwelt for a long time with the highest satisfaction; but our resolution of a speedy journey induced us to give up this pursuit, and, by returning once more to mount our horses, to quit this delightful spot.

We got this night to a little settlement on the frontiers, where we slept at the house of a very intelligent man, and who was the founder of the place in which he lives: his house is also facing the Little Miami river, which here assumes a width far superior to what it does where my friend's settlement is. He treated us very hospitably, and wished us to stay with him longer; but we proceeded on our journey early in the morning, and before the day was closed we reached Columbia, where we found Dr. Bean expecting us. In this last day's journey we came through several settlements, and everywhere round about we found people busy in making sugar from the maple-trees. When any one has formed a plantation, he fixes upon a spot near his house which abounds with these trees, and this place he calls the sugar grove; and here it is that his family is fully employed during the latter winter and the early spring months in making that useful article. A great smoke from the boiling caldrons, and a confused murmur through the woods, would indicate our approach to any of these industrious

spots; and as it was my business to remark upon whatever I saw before me, I could not help reflecting how much more usefully and laudably employed these were, who with so little trouble, and at the expense of neither cruelty nor injustice, but in the midst of peace, innocence, and happiness, were furnishing themselves with the luxuries of life, than those who by cruelty, rapine, and oppression, to the degradation of human nature, were so oppositely pursuing the same ends. Methought if mankind had ever been witness to the two different scenes, they would require no other inducement to countenance the one, and *for ever* discourage the other. Go then, said I to myself, and proclaim to the world the misery of the one and the happiness of the other; and happy shall I be, if even in a small circle I can produce sufficient conviction to induce them to hold up their hands against that bane of public virtue and domestic happiness—The Slave Trade.

Being now returned to Columbia once more, I began to think of getting my things ready, and to take advantage of the first boat* that came down the river, that meant to proceed to New Orleans. As they go a great way through an uncultivated country, and as three or four hands are necessary to navigate her in cases of difficulty, the proprietors of them are happy in taking any person with them that offers; not only for the sake

* These boats are generally loaded with flour in the upper countries of the Ohio; and, as the navigation of that river is not expensive, they put three or four hundred barrels into one boat, and proceed with it down to New Orleans, where they generally find a good market for it; and, in fact, it is the only foreign one they can have, on account of their inland situation.

of company, but also to save them an expense, as they must otherwise hire other people to go with her ; and the only duty on your part that is required, is to assist in case of need, which any person would willingly do, because his own safety is concerned. Having, therefore, got a few provisions together, consisting of biscuit, flour, brandy, beef, bacon, &c., enough to last me a couple of months, and having packed up a trunk or two of articles for trading with the Indians, (as money with them is of no service,) I waited with an anxious expectation the arrival of a boat, and it was not long ere I was gratified, for on

Monday, April 3rd, 1797,—an Orleans boat (as it is here called) stopped at the town, and upon my inquiring whether they could make room for me, they seemed glad to receive me, and willingly accepted my offer of accompanying them. But as I wanted to get some business done at Cincinnati, I proposed to go down there first and wait their arrival, which was agreed upon. Therefore, about five o'clock this afternoon I put all my luggage into a little canoe, and, though the wind was high, set off down the river for the above-mentioned town, which lay about six miles off ; taking leave of my friend H., whom I heartily shook by the hand, and wished a long life to see his new colony flourish and be happy. And now behold me, near a thousand miles from New York, from whence I set out, deprived of the only companion and friend I had during this long journey, and with a prospect of four or five thousand miles more, through an uncultivated and desert wilderness, ignorant of the persons with whom I was destined to embark, and without a surety of a safe return. I felt all these ideas

crowd into my mind immediately before the moment of my departure ; and, I believe, if I had dwelt long upon them, I should have been induced to have directed my course towards my own home once more, or to have taken up my abode with my friend H. ; but I was hurried on with the prospect of seeing new scenes, and beholding nature in a state of which the mind can have no imagination ; united also with a certain spirit of enterprise which is the common lot of all men, and which prevents the human faculties from remaining supine and inactive, in whatever situation they are placed. This is the best account I can give of my subjecting myself to those inconveniences and difficulties, and (in many cases) extreme dangers, to which I was afterwards exposed.

I floated most pleasantly down this delightful current, which now flowed at the rate of five or six miles an hour, and in a short time reached my destined port. There I put up at the —, kept by one —. I was deceived into these quarters, as I took them for Yeatman's, which is by far the best tavern ; but, as I was a short visitor, I did not think it worth while to change them. After finishing my business here, and the boat not being arrived, I walked out to examine the town, and observe its situation, &c. I have taken occasion to express my approbation of the American mode of laying out their new towns, in a general way, in straight lines ; but I think that oftentimes it is a sacrifice of beauty to prejudice, particularly when they persevere in making all their streets cross each other at right angles, *without any regard to the situation of the ground*, or the face of the surrounding country : whereas, these

ought certainly to be taken into the consideration, in order that a town may unite both utility and beauty; and, with a little attention to this, a town might still preserve the straight line, and yet avoid that disgusting appearance which many of the new towns in America make. For it not unfrequently happens that a hill opposes itself in the middle of a street, or that a rivulet crosses it three or four times, thereby rendering its appearance very disgusting, and its passage very inconvenient: whereas, if they would fix upon all the eminences upon the site as so many central spots from which streets were to proceed like rays from a centre, and make all the minor streets subservient to these, and suitable to the other irregularities of the ground, in the manner that the new city of Washington is laid out, they might preserve an uniformity, a cleanliness, and agreeable prospect through the whole, which upon the other plan is oftentimes entirely lost. From this digression, it should appear that Cincinnati comes under the latter description: but let it speak for itself.

Cincinnati is built on the bank of the river Ohio, immediately opposite the mouth of Licking river. On the eastern bank of the Licking is a settlement called Newport, consisting of about fifty or sixty houses, mostly frame-built; and as the country opposite is otherwise very well cultivated, it presents an agreeable prospect from the town. About two or three hundred yards from the borders of the river, and preserving an unequal distance from it, the second bank commences, which is about thirty or forty feet high, and which subsides into a level country at the top. The town, therefore, is built partly on the bottom and partly on the second bank; and the streets run

towards the four cardinal points, crossing each other at right angles, without any regard either to the direction of the second bank, or to that of the river, which here runs about west-south-west, and thereby cuts off the connexion of several of the streets with each other, except by a circuitous route. If they had made one of their principal streets to face the river, and the other at the brow of the second bank, this inconvenience might have been avoided, and the whole town would have presented a noble appearance from the river.

Cincinnati may contain about three or four hundred houses, mostly frame-built. The inhabitants are chiefly employed in some way of business, of which there is a great deal here transacted, the town being (if I may so call it) the metropolis of the north-western territory. This is the grand depôt for the stores which come down for the forts established on the frontiers; and here is also the seat of government for the territory, being the residence of the attorney-general, judges, &c., appointed by the president of the United States, for the administration of justice. On the second bank there is a block fort with two ravelins; and between the fort and the river, and immediately upon the borders of the latter, is the artificer's yard, where a number of men are kept continually employed in furnishing the army with mechanical necessities, such as tubs, kegs, fire-arms, &c., &c. On the second bank, not far from the fort, there are the remains of an old fortification with some mounds not far from it. It is of a circular form; and, by walking over it, I found the mean diameter to be 312 paces, or 780 feet, which makes the circumference very near half a mile. There are on the ramparts of it the stumps of

some oak-trees lately cut down, which measured two feet eight inches diameter, at three feet from the ground. The mounds, which were at but a short distance from it, were of the same construction as those I have described at Grave Creek.

At Yeatman's tavern I met with Mr Burnett, a gentleman whom I had known at Pittsburgh, and who had reached this place before me; he was attending the courts here, as it was his intention to follow the law in this part of the country. He informed me that Mr. Volney, the French philosopher, had just left this place, and had pursued his journey through the wilderness towards Detroit, situated on the river St. Lawrence, between Lake St. Clair and Lake Erie; and that he was traversing that part of the country to ascertain some particulars relative to the winds. Mr. Burnett also informed me that he intended to pursue nearly the same route; namely, to proceed to the lakes, and to go down through them and the river St. Lawrence, till he came to Montreal or Quebec, and from thence to cross over to Lake Champlain, and proceed down the North River to New York. He asked me if I were willing to accompany him; and at first I seemed to fall in with his proposal, as I had here an opportunity of travelling with an intelligent companion, and through an interesting part of America. Here my eyes would have been feasted with those immense bodies of fresh water, surrounded on all sides with stately forests. Here I should have seen that tremendous cataract of water, the Falls of Niagara, whose waters, after running a course of some thousand miles, and forming lakes, which, collectively taken, amount to near seventy thousand square

miles are hurried with prodigious velocity, and a thundering torrent, over a perpendicular precipice, one hundred and forty-nine feet high. Mr. Ellicot, from whom I learnt these particulars, and who had measured the Falls, informed me, that for a mile about, the water descends in a rapid of fifty-eight feet with astonishing violence; and below the Falls, for near eight miles, it continues to descend in another strong rapid. He also told me, that the elevation of Lake Erie above Lake Ontario was three hundred feet. So grand a spectacle as this would have been worth all the pains and trouble in getting to it, and particularly when I add to it the beautiful scenery of the North river, whose banks are so highly picturesque and enchanting. But I had arranged all my affairs, and had determined within myself to proceed to New Orleans, where, if I missed one set of noble objects, I should meet with another no less beautiful and interesting: and I could, at least, have it to say that I had passed over the small current of the Ohio, surrounded by a highly fertile and romantic country, from its source to its mouth; and then have followed it, after it had mixed its gentle stream with the more majestic torrent of the Mississippi, besides travelling an immense tract of country, where I should have an opportunity of seeing nature in her true and most lovely colours. These considerations induced me to reject the proposal, and to pursue my original design; and in a day or two I had the pleasure of seeing our boat arrive at the banks of the river. I soon found that the cargo in the vessel was owned by the two persons who conducted her, and who were farmers in the upper country, and had joined their produce together, and were going upon their second ad-

venture. This latter I was glad to find, as thereby they would be better able to conduct the boat through the dangerous navigation of the Mississippi. They appeared to be very good sort of men, though not the most refined of those I have seen frequent these waters. However, as we cannot choose our lot in every situation of life, but must often put up with what appears, at first, a temporary inconvenience; and as the accommodations in every other respect were pretty comfortable; I put my things on board, and the weather being favourable, we started from this place on—

Saturday, April 8th.—We had previously taken another person on board who wished to proceed down the river, so that in all there were four of us. The names of our captains (if I may so call them) were Simpson and Kerr. And in order to keep up the forms observed aboard such vessels, we had each our station and office appointed him, as soon as we were properly *out to sea*. They very kindly favoured me: I say, *kindly*, because in this country, and particularly in travelling, and more particularly in this manner of travelling, there is no distinction of persons; but every one must put his labouring hand to the oar, and keep his appointed watch if they float by night. We deputed the office of cook (which, by the by, was a very insignificant one, as our fare was not very sumptuous) to the last comer, which he executed very ably. There was nothing to be done during the day, as we suffered the boat to *float* according as the stream carried her, which was at the rate of five or six miles an hour; the only attention required was to keep a good look-out, as the sailors call it, and see that she did not drift against the sides of the river, which (as the

banks were overflowed, and the stream continually drawing towards the sides) it was not improbable she might do ; and if no one observed it, might drive against the trees and be dashed to pieces. However, as the weather was remarkably fine, we all executed this office without reluctance ; and if we saw her drifting towards either side, a pull or two at the oars (if taken in time) would set her right again : and our succession to this office was changed every two hours. Our nightly watches were divided into two, one of which sat up the preceding part of the night, and was then succeeded by the other, who watched in their turn. We thus adjusted the regulations of our boat, and very amicably settled the disposition of our different offices. And now, upon committing myself once more upon the fair bosom of this beautiful river, I could not but remark the different appearance it presented from what it did when I was last upon it. Its banks were then hardly full, and the bare trees on the shore opened a wide view into an inhospitable and desert country ; but now its banks were for the most part overflowed, and the current seemed to swell in the middle. The trees, too, were putting on a new coat, kindly given them by the returning spring, and seemed at once to bid defiance to our view, and to shut out the *now* enchanting prospect from our sight. The stream, too, had increased much in its rapidity, owing to the vast quantities of water which were now (according to the accustomed period) accumulating in the upper countries. Serenity of air and mildness of atmosphere, had also taken place of the chilly morn, and the boisterous tempest. Nature was now arraying herself in her gayest and most attractive colours, and seemed to promise us a speedy and a plea-

sant journey. We put ashore this night (on account of the appearance of the weather) about five miles above the Great Miami, and next morning,—

Sunday, April 9th,—we started by daylight. We had observed a canoe ahead of us the preceding day, and for the sake of company wished we could have overtaken it; but as the person who was in it did not seem disposed to stop for us, we soon lost sight of him, as he proceeded along much faster than we. However, this morning we observed the same vessel behind us, and in a short time it came alongside. It contained but one old man, accompanied by his dog and his gun, and a few things lying at the bottom of the canoe. We called to him to come into our boat, which he accordingly did; and after a little conversation, our guest proved to be old Colonel Boon, the first discoverer of the now flourishing state of Kentucky. I was extremely happy in having an opportunity of conversing with the hero of so many adventures, a relation of which is drawn up and published in Imlay's Geography. Happening to have this account by me, I read it over to him, and he confirmed all that was there related of him. I could observe the old man's face brighten up at the mention of any of those transactions in which he had taken so active a part; and upon my adverting particularly to his adventure in August, 1778, with the Indians at Boonsborough, (a considerable town, so called from the remarkableness of the transaction, and the fame of its founder,) where they, with most barefaced deceit, endeavoured to take him and his men prisoners, he entered upon the subject with all the minuteness imaginable, and as descriptively as if it had recently happened. He then made us follow him in his narration,—how

he was taken prisoner by the Indians, and carried a tour round the lakes with them ; and the old man interspersed his tale with many a pleasing anecdote and interesting observation. He took (in truly an Indian style) a drop of water, and on a board he marked out the whole course of his travels ; and, though I showed him a map, he continued on, after barely looking at it, and would not be diverted from the one which he had formed with his own finger. Upon asking him whether it did not give him a secret satisfaction to behold a province (in the discovery and settlement of which he held so conspicuous part) rise from a desert wilderness, and at once to flourish in arts and sciences and the conveniences of life, in all the maturity of old age, he shook his head, and with a significant frown, said they were got too proud ; and then began to enter into the disadvantages of great improvements of society. I easily conceived his meaning, and soon found that he was one of that class of men who, from nature and habit, was nearly allied in disposition and manners to an Indian, and may be ranked under those who form the first class of settlers in a country. He said he had a great deal of land given him on the first settlement of the country ; but that when societies began to form around him, he moved off, and divided his lands among his relations, unwilling (as he expressed himself) to live among men who were shackled in their habits, and would not enjoy uncontrolled the free blessings which nature had bestowed upon them. Since this time, he told me he had spent his time a great deal on the frontiers ; and at this present moment he said he was going to hunt for beavers in some unfrequented corner of the woods, where undis-

turbed he might pursue this amusement, and enjoy the pleasures arising from a secluded and solitary life. He said that last night when we missed him he had put ashore in a little creek, on account of the weather, and that after taking some refreshment, he threw his blanket round him, and lying down in his canoe, fell asleep. I was much pleased with the old man's conversation, as he appeared to be one who had seen a great deal of the world, though in its most uncultivated state; nevertheless, being a man of strong natural parts, his observations on the different objects which had passed before him rendered the half hour he stopped with us very interesting and amusing.

The afternoon being windy, we were obliged to put ashore about a mile and a half below the mouth of the Great Miami, and here we stayed till about eight o'clock in the evening, when the weather being favourable and the moon bright, we put *to sea* again, and continued to float all night, and the next morning,—

Monday, April 10th,—about nine or ten o'clock, we came to Port William, a settlement at the mouth of the Kentucky river. This was a place I wished to see very much, not that it contains anything very remarkable in itself, but as being the spot where that river which gives a name to one of the most flourishing states in the Union loses itself in the fair bosom of the Ohio, after running a course of 200 miles, and dividing the country by its meandering and highly romantic course. By a person who had lately descended it, I was confirmed in that account which Imlay gives of the remarkable curiosities of its banks :—"The astonished eye (says that author, p. 322) beholds almost everywhere 300 or 400 feet of a solid

perpendicular limestone rock, in some parts a fine white marble, either curiously arched, pillared, or blocked up into fine building stones. These precipices are like the sides of a deep trench or canal, the land above being level, except where creeks set in, and crowned with fine groves of red cedar. It is only at particular places that this river can be crossed, one of which is worthy of admiration; viz., a great road large enough for waggons made by the buffalos, sloping with an easy descent from the top to the bottom of a very large steep hill, at or near the river above Leestown." These were curiosities which he told me he was highly gratified in going to see; but at the same time he said that it rendered the navigation of the river (except at the time of high-water) very dangerous for boats, on account of the immense number of rocks which were scattered in different parts; and in summer time these rivers are almost completely drained. This remark may serve for the whole state of Kentucky, for it lies so high above the level of the ocean, that when the rains do not keep up the constant waste which is caused by the rapid streams of its rivers, a general drought becomes prevalent through the country; and both springs and rivers are deficient in this necessary article of life, which is severely felt by the inhabitants in very dry seasons.

This spot is remarkable for having a tree at the mouth of the river, on which James McBride, who first discovered this part of the country, cut his name. He was proceeding down the Ohio with some others in canoes, and, landing here, cut out the initials of his name, with the date. This was in the year 1754; and from that time till 1767 the communication of his discovery remained unnoticed, when about the latter period Mr. Finley penetrated into

this province by land. But having some disputes with the Indians, he returned, and communicating his observations to Colonel Boon and a few more, they agreed, in 1769, to explore it, which was accordingly done; but after a number of difficulties and trials, they were cruelly murdered by the Indians, except the Colonel, who continued an inhabitant of the wilderness till 1771, when he directed his steps towards his own home; but in September, 1773, he returned again to this delightful region, bringing with him five families more, and forty men that joined them in Powel's Valley: and from this æra may be dated the first settlement of this state. However, the settlements did not materially increase during the long continental war with England, in which that power excited the Indians to oppose the emigration of the Americans into these back provinces, which retarded very much the improvements which otherwise might have been made. But at the restoration of peace, encouragement was given and advantages held out, by which Kentucky since that period has arrived at a pitch of opulence and improvement unparalleled in the annals of history. Scarcely ten years had elapsed, when this country sprang from a desert and uninhabited wilderness into all the maturity of cultivation and advancement of society. Those ranks of men who form the first and second classes of society have moved off, and left the country for the most part to be possessed by those who have been brought up in all the refinement and civilised manners of their brethren on the eastern side of the Allegany mountains. From a few straggling settlements scattered over this vast territory, whose inhabitants were obliged to shut themselves up in block-houses, and establish their right by the point of the

sword, who ranged lawless through this wilderness, every one doing that which seemed right in his own eyes—there have arisen (as Imlay justly expresses it) fertile fields, blushing orchards, neat and commodious houses, and trading towns, whose inhabitants have imposed upon themselves the just restraint of mild laws, and who, increasing in numbers, can lie down secure and free from all apprehensions of the tomahawk or scalping-knife. Such has been the wonderful progress of this country, to have implicit faith in which, it is first necessary (as Imlay once more expresses himself) to be a spectator of such events.

Port William (the spot from which I now write) contains about sixty houses, and is pleasantly situated on the eastern side of the mouth of the Kentucky. The Ohio, opposite this place, is about 600 yards wide, and the Kentucky appeared to me to be about 100. There are a number of boats at this season of the year that come down the river Kentucky from the interior parts of that state laden with flour, tobacco, hemp, &c., which they take down to New Orleans; and Port William is generally made a landing place, where they stop before they proceed down the Ohio.

We started from this place about eight or nine o'clock this evening, in order that we might get to the Falls by the morning. There was another boat at Port William, which was going down to New Orleans, and we agreed to keep together all the way as well as we could. It is always most pleasant in going down the Mississippi, where you pass through such an immense tract of uncultivated country, to have as many boats as you can in company, not only for the sake of society, but also in case you should

stand in need of assistance during the course of such a dangerous navigation.

We both started in company, and the weather being very favourable and the night serene, we lashed both our boats together, and suffered them to float in this manner during the whole of the night; by this mean we relieved our watches very much, and enjoyed the advantages of an extended society. In the morning,—

Tuesday, April 11th, 1797,—about seven o'clock, we came to an island, which indicated our near approach to the Falls, being only twelve miles from it; and at eight we came to another, near the mouth of Goose Creek, six miles from it. These are the only islands (except two just above Port William, and three just above Limestone) to be met with from the Great Kanaway to this place. At nine we came to Louisville, (seventy-five miles from the Kentucky,) where all the boats going down the Ohio put ashore to take in a pilot to conduct them over the Falls.

Louisville, which may contain about 200 houses, chiefly frame-built, is pleasantly situated on the second bank of the river, which is about fifty feet higher than the bed; and you do not catch a sight of it till you come into the mouth of Bear-grass Creek, which is a stream of water flowing along the eastern boundary of the town, and emptying itself into the Ohio, thereby forming an excellent harbour for the boats which come down that river, so that they are in no danger of being driven from their moorings and carried over the Falls. The reason you cannot see the town till you come immediately upon it is, that you are obliged to keep to the left shore, in order to get into the creek; otherwise, if you ventured far out

in the stream, you would get into the *suck* of the rapids ere you could possibly recover yourself, which would prove the destruction of the boat and yourself too. The prospect from Louisville is truly delightful. The Ohio here is near a mile wide, and is bounded on the opposite side by an open champaign country, where there is a fort kept up for the protection of this infant colony, and called Fort Steuben. About two miles lower down on the opposite shore, is Clarkesville, a little village consisting of about twenty houses. This settlement was formed by General George Rogers Clarke, who had a share of the 150,000 acres of land which was given to him and other officers who were at the reduction of Kaskaskias and St. Vincent's, and which was laid out in that part of the north-western territory immediately opposite Louisville. But what tends to signalize this place, and to render its prospect still more enchanting as well as awfully grand, is the almost perpetual presence of an immense cataract of water, formed by the Ohio hurrying itself with the greatest rapidity over a ledge of limestone rocks, which extend from one side of the river to the other: I say, *almost perpetual*, because in time of high-water, when the banks are quite full, the torrent is scarcely perceptible except in one place, and boats of any size may pass over with the greatest safety and in the darkest night; but when this supply is not kept up, and the water below begins to lose its level, then the torrent begins to roar, and loud-sounding rocks to foam with unabated vigour; then the boat twists its unyielding sides to the force of the compelling current, and the long-accustomed pilot with dismay exerts himself, and stirs on his associates to lend a willing hand to save him from the impending

destruction; till at last, escaped from all danger, the vessel (like an arrow from the bow) is propelled with great violence from this Charybdis, and in peace once more possesses the wonted gentle course.

Louisville is the last place of any consequence which you pass in going down the Ohio; for, though the state of Kentucky extends as far as Cumberland river, yet there are few or no settlements of any consequence after passing this place. Here then we may date our departure from this renowned country: a country which the flattering pen of Imlay has so ably pourtrayed; and whose description, though at the same time perfectly reconcileable to facts, does not give that just idea of the country, which a person on reading his work would be apt to suppose. He has held up to our view the favourable side only of this country, and has hid from us the many dark traits which tend to render its habitation but little above mediocrity; at least, to those who have been brought up in different habits of life to what are here manifested. As to the climate, and face and soil of the country, nothing can be finer, or more fully answer the expectations of those who emigrate hither, and to these he has done justice in the description; but then there are a number of other things, both in the state of society and in the general habits of the people, which, in my opinion at least, far overbalance these advantages; and of these I shall treat, when I come to describe the manners and customs of the Americans in general. But there is one thing that is very much against this country, and ever will remain so, till some very active measures are taken to prevent it; and that is the total uncertainty in the titles to the lands. This is an evil which loudly calls for

redress, and has very much obstructed the further advancement of this country, and has added vigour and strength to the infant settlements on the other side of the Ohio, where the titles are of a more sure origin. The uncertainty of titles to Kentucky lands is become quite a proverb, and arises from the negligent and careless manner in which the government suffered the first emigrants to settle the country. There are three different ways of acquiring titles:—the first is by a pre-emption right; second, by warrants; third, by purchase. If a person goes and settles in an uncultivated country which is not claimed by any party, and clears a spot of ground, and marks a space round his plantation;—when the country comes to be settled the inheritance is generally confirmed to him, and he is said to have acquired a pre-emption right. At the close of the American war several of the soldiers, instead of being paid in money for their services, had warrants given them for a certain quantity of land, which they might *locate* wherever they found it unoccupied:—to locate, means to particularize and describe correctly the place which is intended to be reserved for the sole use and possession of the person claiming the same: so that a person with one of these warrants, whenever he saw a piece of land which he approved, would immediately locate it for his own use; that is, he would describe the bounds of that land which he meant to reserve for himself. The third way, viz., by purchase, is accomplished by going to the land-office of the government, and buying what quantity of land (unoccupied and unlocated) you may have occasion for. Now, it has often happened, that these different titles have clashed with each other; and even the same methods of acquir-

ing titles have often clashed with each other; for if two persons happened to fix upon the same spot, they might each locate it unknown to the other, or their different boundaries might so far intersect each other, that part, if not the whole, of the land might be disputed, particularly as it would be hard to prove who was the first that claimed a title thereto. It has also happened that the government has often incautiously, or rather ignorantly, sold lands to which another person had a prior title by having located it. In this manner was the whole of this state settled, and which is the cause of your buying, almost universally, with every tract of land a lawsuit with some prior claimant; and I believe it has often happened that a person has bought his land two or three times, nay, four or five times, and has had it disputed at last. So that one is never certain when the title is secure; for though you may rest undisturbed in the enjoyment for several years, yet your adversary may come at last, and turn you at once out of all your possessions and improvements. And this backwardness is often designed; for if a prior claimant sees his land in the hands of a good and industrious husbandman, he will let him alone till he has increased the value of it considerably by his improvements. The government of the state is taking means to prevent the like abuses in future, by opening a land-office, where regular entries are to be made of every place located, together with the date of its location; and without an entry of this sort no title will stand. However, it will be a long time ere they can remedy the evil which has been actually introduced by their primary neglect of this salutary institution.

We stayed at Louisville till *Thursday, April 13th,*

when about half-past one P.M. we started, having taken on board Dr. Watrous, who is a surgeon in the army of the United States. He appeared very much of the gentleman ; and we were pleased to receive him, as he flattered us with the idea of being an agreeable companion. Owing to the height of the water, we scarcely perceived any difference in going over the Rapids ; they had now lost all that turbulence and violent emotion which at any other season they preserve, when the foaming stream rushing with impetuosity against the firm rocks is cast in clouds to the sky, and depicts dismay in every countenance ; and in passing over which, the passengers may truly say, with *Æneas*,—

Tollimur in cælum curvato gurgite et idem
Subductâ ad Manes imos descendimus undâ.

Just below the Rapids there is a landing-place, where the boats generally stop to put ashore the pilot who conducts them over the Falls : here we stayed about four or five hours, and about six we started again, and at twelve at night came to Salt river. This stream of water, which is about one hundred and fifty yards wide at its mouth, forms a curious meandering course through a most delightful country, and is curiously interlocked at its source with those streams which form the heads of Green, Dicks, and Rock Castle rivers. It is navigable for sixty miles, and at about fifteen miles from its mouth is joined by the Rollingfork, which is a considerable branch of Salt river. We continued floating day and night without any material occurrence till (*April 14th was Good Friday*)

Saturday, April 15th,—when about six o'clock we came into the Low Country, which is one hundred and fifty miles from the Falls. This is properly the termina-

tion of those hills which commence about the mouth of Sandy river, and gradually decline to this place; and now, instead of those romantic scenes which a broken and a hilly country often afforded us, we had an entirely flat and overflowed, though at the same time rich and fertile, country continually presented to our view; and this uniformity of appearance, with very little deviation, is preserved till you come to Natchez, which is a considerable way down the Mississippi. Here we began to enter upon that immense tract of fine land lying between the Allegany mountains on the east, and a range of similar mountains extending on the west through Louisiana—a tract of land which is watered by some of the finest streams and one of the most noble and majestic rivers in the world, and unequalled in point of fertility by any throughout the globe.

About half-past one we came to Green river. This river, which is about two hundred yards wide at its mouth, it has been observed, curiously interlocks itself with the heads of Dicks, Salt, and Rock Castle rivers, and is navigable for a hundred and fifty miles from its mouth. It preserves nearly a western course for a considerable distance, when it turns to the northward, and empties itself into the Ohio at the place above mentioned.

At half-past three we came to Pigeon Creek. This is the general landing for persons coming down the Ohio, and going to Post St. Vincent's, which is a considerable settlement on the Wabash river. It was first formed by the French, when they claimed this part of the country north-west of the Ohio; but being taken by the Americans, the original settlers were confirmed in their possessions, and at this time carry on a considerable trade

with the Indians, with whom they barter guns, powder, blankets, &c., in exchange for furs, skins, &c. It is situated about a hundred and fifty miles from the mouth of the Wabash, which empties itself into the Ohio, and by means of which the inhabitants carry on a foreign trade with New Orleans. There is a path from this place to Pigeon Creek (from which I now write) by which emigrants to this place drive their cattle, &c., to the Post, which saves them a circuitous route round the mouth of the Wabash, as well as the great difficulty of ascending that river. Opposite this place we put ashore for two hours, and at half-past five started again, and, floating all night, about eight o'clock the next morning,—

Sunday, April 16th,—came to the Wabash. This river is ninety-eight miles from Green river, and is about three hundred yards wide at its mouth ; and, except some considerable rapids, is navigable upwards of four hundred miles ; it is separated from the Miami of the lakes, by a portage of only nine miles, by means of which a communication might be easily opened between Lake Erie and the Ohio. Here we saw a number of Indians encamped on the shore. We got into our canoe and went to them ; but they were so surrounded by bushes and trees, and the country overflowed for so considerable a way in, that we could not get to them, though they hallooed to us, and seemed to wish it very much. About half-past five we came to Big Cave. This curious place is situated about forty-three miles below the mouth of the Wabash river ; and having understood that it was worth seeing, Dr. Watrous and myself got into the canoe, about half an hour before we arrived at it, and proceeding ahead of the boat as fast as we could, in order that we might not be

left behind, we landed just at the mouth of it. It is formed by a long ledge of limestone rock, extending a considerable way along the banks of the Ohio. By what means this place was excavated is entirely unknown. Its entrance was on a landing-place, and its mouth was ten feet high and twenty feet wide, and it extended about fifty feet inwards, so that it had somewhat the appearance of an immense oven. We entered it and found the sides very damp, and observed a constant dropping from the roof, occasioned by the moisture filtering through the stone. Here likewise we beheld a number of names cut out in the sides of the cave, which in this solitary place, and cut off as we were from society, gave us even a degree of pleasure to look over; and in which employment we should probably have persevered some time, had we not been called off by the shouts of our companions from the boat, whom the too rapid stream had caused to overtake us so speedily. We hastily obeyed the summons, and on coming out into open day, we were astonished to observe how prodigiously swift the boat appeared to fly past us. We immediately hurried into our canoe, and it was near an hour ere we could overtake it. On getting into the boat again, and looking over the side, directly into the water, we were again astonished to observe the difference of motion with which we appeared to go; in this case we scarcely seemed to move; but on taking our eyes off and casting them on the shore, the deception immediately vanished, and we appeared to be carried along with our usual rapidity. The bank of the Ohio immediately below the cave is a perpendicular rock of limestone for some distance, and has much the appearance as if it were the

work of art, and thrown up for a fortification ; it is overgrown with moss and bushes, and terminated towards the shore with lofty trees ; and the whole appearance forms a beautiful object, particularly as the eye has so long dwelt upon the same general appearance for many miles down the river, without meeting with any object to relieve it from this uniformity.

At dark this evening we *came to*,* in consequence of a violent storm of thunder and lightning, which now threatened us with the most dreadful explosions, and the most vivid flashes I ever experienced in my life. A long residence in this country habituated me to those storms, of which we can form no idea in the old country, and had worn away all the unpleasant sensations which are generally caused by this phenomenon ; so that, in the language of Mr. Burke, as I was divested of all fear, I could enjoy the true sublime without any alloy. We made our boat fast to the trees, and got as far between them as we possibly could (for the banks were overflowed) in order to screen ourselves from the wind, which blew very hard. In a few minutes the lightning began to flash, and the thunder to be re-echoed from the woods in such dismal crashes, and such long rolling peals, as to be utterly beyond the power of description. This lasted, with some intermission, nearly the whole of the night ; and the next morning,—

Monday, April 17th, 1797,—about half-past five, we put *to sea* again ; but the wind coming on rather suddenly, we were obliged to put ashore again about eight. The river now was near a mile wide, and the stream running

* To *come to* is a sea phrase.

so rapidly, the least wind (which is generally *up* the river, when there is any) caused such an ebullition in the water, that our boat (to use a sailor's expression) could not *weather* it ; it would work her so much as to cause her to take in a great quantity of water ; and if great haste be not made, she would soon go to the bottom ; so that it is very dangerous in these boats in a windy day. As we were nearly in the middle of the stream, it was some time ere we could get her to shore again, as the stream was so strong and our oars had very little power over it ; and she was nearly half full of water ere we could accomplish our purport. However, having got her moored in safety, we cleared her out as fast and as well as we could ; and about ten o'clock at night, the weather clearing up again, we put to sea once more, and continuing to float all night, we came the next morning,—

Tuesday, April 18th,—about eight o'clock, to Cumberland river, which is fifty-two and a half miles from the Big Cave ; and just below the mouth of the river, we were obliged to put to again on account of the wind ; which, as usual, was directly in our teeth, and impeded the progress of the boat very much.

Cumberland river is a considerable branch of the Ohio, and is about 300 yards wide at its mouth ; its current is gentle, and it is navigable upwards of 200 miles from its mouth ; that is, in large vessels to Nashville, and thence in boats to the mouth of Obed's river. It rises in the same range of mountains that the Tennessee river does, and preserves nearly the same general course ; and though it is separated from it in some places near 100 miles, particularly where the latter forms what is called

the Great Bend, yet the two empty themselves into the Ohio at only eleven miles distance from each other. A great number of boats come round this way and ascend this stream in order to get into the interior of the new State of Tennessee; that is, to the settlements on the different waters that run into this river.

About three o'clock in the afternoon we started again, and about six (the wind still continuing rough, which impeded our progress) we came to the Tennessee—a river so noble and so broad, and coming down with so rapid a current, that it might be mistaken (in ascending the stream) for the Ohio itself; in fact, it may as properly be called the Ohio, as the branch which goes by that name, for the two streams make an equal angle with the lower current, and would easily deceive a person coming against the stream if he did not know on which side the Tennessee lay. This river, I have just observed, rises in the same range of mountains that the Cumberland does. I shall extract what Imlay says upon this river, his observations being agreeable to those I have made myself. “The Tennessee is the most important of the southern branches of the Ohio. Its northern fork, called Holston, rises in the country of the same name; and after passing through Nolachucky, is joined by the main or south branch. This branch rises in the remote parts of the state of Georgia, and after traversing the borders of the Cherokee country is joined by the Holstein branch, when it is called the Tennessee; from thence it runs south-westerly, and approaches the head waters of the Mobile, which empties itself into the Gulf of Mexico. In its course it is very rapid thus far, from the material declivity of the high country, which from mountains naturally

sinks into a flat. There is a number of falls, but none of them considerable. It now begins to turn to the northward ; and from its lazy motion it is evident there is very little fall of water from this to the Ohio. This turn constitutes what is called the Great Bend of the Tennessee ; and in this bend there is a place in the river which widens from two to three and a half miles, and about thirty miles long ; and from the number of shoals just here, which are covered with muscles, it is called the Muscle shoals ; and the river almost from its source to this place is navigable by vessels of forty or fifty tons burthen, except in some few places where there are rapids ; and from the Muscle shoals to the Ohio, a distance of 260 miles, it is navigable by vessels of any size." I shall have occasion to speak again of this noble river, as it will be found that on my return, I traversed great part of the country through which it flows. Early the next morning,—

Wednesday, April 19th,—we started, and about seven o'clock came to Fort Massac, eleven miles from the Tennessee. This station is pleasantly situated on a point of land which projects somewhat into the Ohio, and commands a fine view up the stream. It was first planted by the French when they had possession of this country, and formed one of that vast chain of forts which the ambitious views of the French monarch had at that time established in order to ensure the conquest of this country, and thereby unite the two provinces of Louisiana and Canada. It takes its name from a cruel massacre* of the garrison by the Indians, when the French had posses-

* Massac is a corruption of Massacre.

sion of it, and the story related of this transaction by the inhabitants is this :—The Indians had a long while endeavoured to get the garrison out of the fort, in order that they might attack them with more certainty of success ; but having tried several expedients in vain, they at last hit upon the following. After having apparently retired for some time from the fort, an Indian dressed himself up in a bear's skin, and on the opposite shore began to imitate the actions of that animal. A number of the garrison unsuspectingly ventured across to attack him. This had the desired effect : the cunning impostor, as soon as he found they had taken the bait, began to climb the bank, and with a slow step to lead his adversaries into the wood. They followed and fell into the ambush which was prepared for them ; and at the same time a party of the same tribe attacked the fort, and cruelly massacred all the garrison.

This fort is still kept up by the Americans as a guard to the frontiers against any attack from this quarter. There are about thirty families settled round it, and the garrison consists, at this time, of eighty-three men, commanded by Captain Zebulon Pike, an experienced officer, who behaved to us with the greatest politeness and attention. He insisted on our coming to his table during our stay at this place, which (owing to the weather) was longer than we expected. There were a great number of Indians encamped about here ; some of whom were immediately upon the shore, others at a little distance up the country. We went up amongst them along with the Captain to see some of their wigwams. They very cordially received us, and we bartered a number of things with them for skins, &c.

On *Saturday*, the 22nd, we had another most tremendous gale of wind, accompanied with the same violence of thunder and lightning. Our boat lay out in the open river; and, though close to the shore, was unprotected from the fury of the wind and waves, which now began to increase exceedingly; and by dashing our boat against the shore, endangered her very much. There was a little creek about two hundred yards higher up the river, into which we ought to have put, when we landed; but the rapidity of the current drove us beyond it. However, we were determined, if possible, to get her up there, where she would be perfectly sheltered from any storm. The hurricane now began to increase, and the thunder to crash with horrible re-echoings from the surrounding woods, like the discharge of numberless cannons at the same time; the vivid lightning, too, appeared to roll around us. In this dilemma we were obliged to haul our boat up against a most rapid current, or she would soon have been dashed to pieces. Our own endeavours being ineffectual to accomplish it, we were going to send up to the garrison to request the Captain to send us some assistance, when some Indians, who were standing on the bank, and saw our helpless situation, kindly offered their assistance; and, by the help of their exertions, united to our own, we soon got her safe to her desired port; in the execution of which, we could not help admiring the undaunted perseverance and laborious efforts of this race of men. After it was accomplished, we could not but thank them for their kind labours. However, they soon spied out something which pleased them much more than bare thanks: this was a barrel of whiskey which we had in one corner of the boat, and which (as they are fond

of all kinds of spirituous liquors) they seemed to have an inclination to taste. As they had been so exceedingly kind to us, we could not refuse them this apparently small request, though at the same time we were rather fearful of the consequences it might produce. Accordingly, having seated them on some barrels round a fire we had in the boat, we drew them some in a cup, which, after going round once or twice, was soon emptied. They then wished for some more. We at first refused; but, on their promising to leave the boat as soon as it was finished, we at last consented. By the time this had gone round, the liquor had begun to take effect, though not to drive them any great length; they were then only in the first stage of intoxication,—a state where the faculties are fully preserved, but the spirit somewhat enlivened. We endeavoured, then, to get rid of them before they got any worse; but they (now grown familiar with us) liked our company (or rather the company of the whiskey barrel) too well to part; and one of them, taking hold of me, made me sit down by him, and began to teach me his language, telling me what he called the different objects which happened to present themselves. We indulged this behaviour, thinking it might draw them from a conduct much worse in its consequences; but they did not continue it long, for the liquor which they had taken began now to take more violent effect, and they were very vociferous for more. We entreated and threatened by turns, in order to induce them to leave the boat, but they would not, and we now began to repent of ever admitting them therein; for if they had once got to quarrelling (which is not uncommon when they are drunk), blood most probably would

have been spilled. In this situation we determined to send up to the garrison for a file of soldiers to come to our assistance; but the Captain, who understood the management of them, came down, and after expostulating with them, told them that there was but one more cup in the barrel, and that if they would drink it ashore they might have it, but not without; so, rather than lose the last dear drop, they consented; and when they had left the boat, we pulled the plank in, and would not suffer them to enter any more. Thus, as the Captain informed us, we had a happy escape from these riotous visitors; for had they been suffered to have gone on as they wished, they would have committed the most atrocious crimes without compunction or remorse. This led me to reflect upon the vice of drunkenness, and to set it down as one of the counterbalances against the boasted advantages of improvements in civilization. Man in a state of nature is content with those gifts which so bountiful a parent has bestowed; he takes these gifts without repining; his days are spent in the delightful pleasures of the chase, which, from the variety of its objects, ever affords something new in the pursuit; when this is over he returns to his family, and they each, with thankful hearts, partake of the delicious repast: his wants are few: his cares are less: and at night he lies down with an undisturbed mind to enjoy the sweet comforts of refreshing sleep, and to awake in the morning to new pleasures. This was the happy lot of an Indian life ere they became acquainted with a race of men who boasted superior endowments, but who (to their shame be it spoken!) have introduced, for the sake of oppression and plunder, their sweet destroyer of all

human cares—the distilled juice of the vine; who have made the days of intoxication, and all its concomitant evils, succeed a state of almost primeval bliss; who have implanted in a quarter of the globe a thirst after a vice, of which, had it not been for them, they would ever have remained ignorant. We stayed at Fort Massac till

Sunday, April 23rd,—when about twelve o'clock we started, Dr. Watrous having left us in order to proceed down the river in a *keel boat*, which had just come from Post St. Vincent. About five o'clock we came to, on account of another storm of thunder and lightning. These storms now became so frequent to us, that it would be endless to note them down every time they took place, particularly on our passage down the Mississippi; I shall, therefore, treat of them among my general remarks at the end of the voyage. This storm continued during the night and the greatest part of the next day; however, about four o'clock P.M., on

Monday, April 24th,—the weather clearing up, we started again, and about seven got to Cash Creek, which is situated about a mile below an island, and about six miles above the mouth of the Ohio. We put in here, as we were unwilling to venture upon the Mississippi before the morning, when we should be able to see our way clear, and avoid the sawyers, which obstruct the navigation of that river very much. These sawyers* are large trunks of trees, which are brought down by the force of the current, and in shallow places stick in the mud, where they adhere so firmly as to be immovable by any exterior force. As it is only at one end by which

* They appear to *saw* the water, whence their name.

they are held, the other appears above water, sometimes a great length, and by the velocity of the current striking against them, they cause a great roaring noise, which may be heard at a considerable distance, and which is generally the index by which their presence is known. The part above water is almost always in motion: I have sometimes seen them so thick as to appear like a little wood of dead trees before us. This appearance was very rare when we descended, as the water was very high and had covered a great many of them; but in dry seasons, I am informed they are very dangerous, as a boat coming against one of them with the velocity with which she is carried by the stream, would inevitably bulge; and it is necessary to use some degree of skill to get through a *grove of these stumps* with safety. This being the case, we waited here till daylight the next morning,—

Tuesday, April 25th,—when we started under the influence of as mild an atmosphere and as serene a sky as was ever experienced: not a cloud was to be seen throughout the whole horizon, and the sun had just risen upon this western hemisphere as we approached the spot where I was to behold that river my eyes had so long wished to see. Presently, on our doubling a point of land which obstructed our view, I had the happiness of seeing the prospect terminated by the majestic current of the Mississippi, which, flowing along with all the apparent insolence of pride, seemed to disdain any connexion with so paltry a stream as the one we had just passed over. I could not but regard this event as a singular one in the course of my travels, and I continued to fix my eyes on the spot where these two noble rivers meet, and form so great a contrast in their appearance—the one in the tur-

bidness and ebullition of its current, the other in its limpid, gliding stream. I say, I could not help feasting my eyes with these objects, till the rapidity of the current hurried me from the view.

The Ohio discharges itself into the Mississippi about forty-six miles below Fort Massac, in $37^{\circ} 0' 23''$ N. L. and $5^{\text{h}} 55' 7''$ W. L. from Greenwich. Its current for the most part is pure and gentle, except when there comes a fresh, when the waters bring with them a considerable quantity of earthy particles, which tinge the river till it has passed off, when it re-assumes its wonted clearness.

I have taken occasion to show in a preceding part of this book, that the Ohio† is very low during the winter season, so much so, as often to obstruct the navigation in its upper parts. The period when the floods come down and cause it to rise depends upon those causes which apply to rivers in general in similar situations; namely, the breaking up of the winter, when the snow on the mountain-tops begins to melt, and the rains to descend, which in this country is about February or March, though there are generally partial floods before Christmas, which rise the river sufficiently for the purposes of navigation. From this time, then, till May the rivers continue to rise; when they gradually decline again, and by the end of June in most seasons they are too low for the purposes of navigation. The rapidity of the current of course depends upon the height of the water in the river, as I have sufficiently

* Mr. Ellicott's Journal makes it $37^{\circ} 0' 22.9''$ and $5^{\text{h}} 55' 22.8''$ = $88^{\circ} 50' 42''$.

† The variation of the magnetic needle at the mouth of the Ohio is, according to Mr. Ellicott, $7^{\circ} 15'$ east.

remarked elsewhere. There is one thing which I ought to mention before I take my leave of this river, and that is what is called the *back current* at the mouths of the different streams which run into the Ohio. These back currents are very favourable to the ascent of the boats up these rivers, and are often waited for by persons wishing to take advantage of them; and they will extend 50, 60, nay, even 100 miles up the stream, and with a velocity sufficient to propel the boat without any external aid. These back currents are occasioned by a sudden flood in the Ohio, whereby the level of that river is rendered higher than the neighbouring streams, and consequently it repels those streams, and causes them to retire within themselves; at the same time, the common channel of the Ohio not being sufficiently large for this sudden effusion of water, it rushes up these openings, and causes a current contrary to the natural course of the stream.

I have now brought you the whole length of the Ohio; and, with regret, I must leave its borders, without any more adverting to the delightful scenery which it was continually presenting to us. If we put ashore to gather herbs and vegetables for our subsistence, we saw the works of nature profusely lavished throughout an uninhabited country; if we possessed the water, our attention was continually attracted by the flight of immense flocks of wild fowl, and other birds, who, undisturbed, preserved their course through the air, regardless of our near approach; or we might behold the nimble deer browsing on the banks, or the fierce bear darting through the thicket. These were scenes which often would present themselves; and, from their novelty and attraction,

made amends for our seclusion from society and friends. We are now arrived at a part of the globe where these scenes no more present themselves, at least those scenes which had the *shore* for their theatre of action ; for the country bordering on the Mississippi is so extremely low, that when the floods come down it is entirely *overflowed*, and that for a great distance back from the river, so that it is but at few places (where the ground rises a little) that dry land appears. Over all the other parts, the stream breaks with astonishing rapidity, and deluges the country to a great depth. When, therefore, we put to shore at night, we are elevated considerably above the ground, and can behold nothing betwixt the immense forests but one continued sea. It is not immediately upon entering the Mississippi that we meet with this appearance ; on the contrary, there are several high grounds, till we advance a considerable way down the river. The first which presented itself was Iron Banks, which is situated on the eastern side of the river, about fifteen miles below the mouth of the Ohio. It is a bluff of white and red sand or clay, on the banks of the river, and has the appearance of iron ore : I say, *has the appearance*, because we could not get ashore to ascertain the fact, as the current set very strong against it, and we had enough to do to keep the boat off. Mentioning this circumstance, I ought not to forget to inform you of the curious appearance which the Mississippi makes just here, and in fact throughout its whole course, on its surface. It is well known that water flowing with great rapidity will form itself into vortices, which are propelled to the surface, and cause a rilling, murmuring sound. This, upon a large scale, is the case with the Mississippi ; but it is particularly observable at

this place, as the clear water of the Ohio and the turbid waters of the Mississippi have not been properly mixed together ; in fact, they may be observed to preserve their different sides for a considerable way down. When any one of these vortices, then, is thus thrown up, it brings with it such a body of slime and mud, that it makes the river appear like one vast seething pot. About three or four miles below the Iron Banks and on the same side appear chalk bluffs. "Bluff" is a name given in this country to any promontory of land that terminates almost perpendicularly ; and these, which are called so on the river, appear to have been formed by the continual washing of the current at their feet, which has caused the base to give way, and thereby rendered the whole side as if broken off by some violent convulsion. This evening we put ashore at an old encamping ground about forty-five miles below the mouth of the Ohio ; and the next morning,—

Wednesday, April 26th, — about nine o'clock, we came to New Madrid. This is a town seated on the western shore of the Mississippi, consequently in the province of Louisiana, and belongs to the Spaniards. It is the first settlement at which you arrive on entering that river, and is about sixty miles below the mouth of the Ohio. Here we put ashore, both by desire and compulsion. By desire, because we wished to provide ourselves with several necessaries for our journey through a long uninhabited country. By compulsion, as the Spaniards (who have *usurped* the exclusive dominion over this river) oblige every boat to land in order that they may give in an account of their cargo, and receive passports, that they may be suffered to proceed unmolested by the

other forts down the river. For, though they had entered into a solemn treaty with the Americans, to allow them the free use and navigation of the river, they yet preserve the same system of tyranny and oppression over its citizens who navigate that river, as if no such treaty ever existed. Here it was that I first saw (stuck up at the door of the Court-house) a proclamation, stating that England had declared war against Spain. This being the case, I carefully concealed the place of my birth, well knowing what an inquisitorial and tyrannical race of mortals I had to pass through. We had scarcely fastened our boat to the shore, when one of the Spanish garrison came down to us, and by signs made us follow him to the commandant of the place. We obeyed, and were introduced to his excellency,* who, by means of an interpreter, asked us a number of questions relative to the nature of our voyage, &c., and after satisfying himself that we were not come to plunder the country, or make them all prisoners, he gave us our passports, and permitted us to depart at our pleasure.

New Madrid is situated on a level plain which extends a considerable way into the country, on the western bank of the Mississippi, just opposite an island which stands nearly in the middle of the river. It may contain two or three hundred houses, scattered about at unequal distances within a mile of the fort, which stands in the centre of a square in the middle of the town, and which contains from thirty to forty men. Great encouragement is held out by the Spanish government to persons settling here; there being given to them from two hundred and forty to four hundred acres of land gratis,

* Don Carlos De Hault De Lassus.

according to their families ; that is, a man and his wife only will obtain two hundred and forty acres, and in proportion as his family is larger the more he receives ; the present value of the land not being so much an object to the government, as the resources which they hereafter expect to find when the country becomes settled. Under this flattering temptation many Americans have been induced to come and settle among them ; and were it not for a few French and Spanish that are mixed with them, it might easily be mistaken for an American settlement. The original plan of the town was according to that of Penn, and the fort possessed that part immediately fronting the river ; but so much does the Mississippi encroach upon the banks, that the original fort has long since been buried under its waters. The ground being but a light earthy soil, upon a loose sand, the river undermines it, and will cause whole acres to fall in together, which, with the weight of so many lofty trees falling, creates a most tremendous crash. This observation will serve for the whole course of the Mississippi, and I have often been witness to it myself. There are a number of settlements formed in the interior of the country, a few miles from the river, and about a mile off there is a prairie, or natural meadow. As I had never seen any of these curiosities of nature, I walked one afternoon to it, and here my eye was delighted with one continued plain for some miles in extent, without a tree or shrub upon it ; and affording a striking contrast with the dark and shady woods from which I had just emerged. These prairies are large tracts of land which are covered entirely with grass, and are supposed by many persons to have formerly been lakes of water, which, from some unknown

cause, have drained off, and left the whole spot without any other covering than a large tall grass, which reaches sometimes six feet high. From the position of this one, which I am now mentioning, I think there is reason to conclude that this has been the case, particularly when it is observed that they are always to be found on low ground : for I have seen some on high ground which go by the name of prairies, that evidently arise from the natural barrenness of the country, and the firing of the woods ; whereas, in these, there cannot be a finer mould, or a more fruitful country under heaven. Sometimes there will be little eminences scattered about these prairies, having clusters of trees on them, which is a further confirmation of their having been lakes, as they may be supposed to have been islands in them.

I do not like New Madrid at all ; I mean, if I had my choice of living in it. It lies under a number of disadvantages, which, in my mind, outweigh all the encouragements with which the government endeavours to tempt you. In the first place, its position is so insulated that it must depend in a great measure upon itself for every thing it wants ; for, though a number of boats pass down this river in the course of the year, and all stop here, yet the commandant will never suffer any thing to be sold out of them, unless it be articles of absolute necessity, and very scarce, such as flour, Indian meal, whiskey, plants, &c. &c. ; for as to manufactured goods, &c., none are permitted to be imported, except such as come through the port of New Orleans, and up the long course of the Mississippi, the freight of which comes enormously expensive to inhabitants situated so far up the stream : though, notwithstanding all the vigilance of the government, a

great deal of smuggling takes place, and there is every reason to think, (in fact, it is well known,) that the commandants not only connive at it, but enter into it themselves; and it is very seldom taken notice of, unless when it makes against their own interest. The usual way of managing this business is to send the commandant a present, which, like an opium draft, lays the Argus asleep, and binds up the hands of justice. In the second place, you are so cut off from society, that if you happen to be placed in the environs of some unpleasant neighbours, you have not opportunity of retiring to another part of the country; for the place itself is but small, and wholly detached from any other settlement in that part of the world. I believe the nearest settlement to it is the one we had just left, viz. Fort Massac, on the banks of the Ohio, and upwards of one hundred miles distant; so that the whole circle of your acquaintance is confined, as it were, to one spot; and you are in a similar situation to a besieged town. In the third place, and what has more weight than all the rest, the Spanish government and I should not agree: so tyrannical a system of oppression, so domineering a conduct is pursued by these petty governors, that I am very sure ere long I should be sent to the mines for opposing them in the execution of their unjust measures. The relation between the people and these commandants, can be best explained by comparing them to a master and his scholars. For the more the one affects the bashaw, the more the other submits to his authority with degrading humiliation. I had frequent opportunities of remarking this in my passage down this river; and, in fact, experienced some of their despotic treatment, which I shall relate in due order.

Notwithstanding these objections, if a person has no other object in view but to amass a little property together for the support of himself and family, and can submit to the vexations and oppressions which so arbitrary a conduct must create, he may pass at least an easy life at New Madrid ; for the soil is so prolific, and the land of so little value, that he may with very little expense support his family.

While we were here, several Indians came to us to trade, and we took in return from them deer and bear skins, and beaver furs. These articles pass current at this place as money ; that is, the regulated price of sheared deer skins is 40 sous, or 2 livres, per lb. ; 120 sous, or 6 livres, per lb. for beaver, 4 dollars a piece for otter, and $\frac{1}{4}$ dollar a piece for raccoon skins ; and at these prices they are a *legal tender* in all payments.

Saturday, April 29th.—We dropped down the river about a mile to the house of Dr. Waters, who is a man of good education, and was present at the first settling of the country ; he appeared to be heartily tired of the place, and said he would leave it as soon as he could arrange all his affairs. I saw nothing which could induce him to stop so long here as he has done ; for he lived in a most miserable tent, with scarcely any of the conveniences of life to make it comfortable. He practised the three different professions of a doctor, a merchant, and a farmer ; the two former of which he carried on in a little room which served him for kitchen, shop, bedroom, and every other purpose for which he might have occasion. He had a number of negroes on his plantations, all of whom were lodged in hovels, as is the custom in this country. In fact, his whole situation and appearance

quite disgusted me with the place. Accordingly, leaving him the next day,—

Sunday, April 30th,—we started about eight o'clock in company with four other Orleans boats, which had arrived at New Madrid whilst we were there. We agreed to abide by each other, and to put ashore at the same place every night ; the signal for which was made by the firing of a gun from the boat which happened to be most ahead. This she was to do when she saw a proper place to stop at, which generally was round the corner of some of the bends ; as *there*, the stream was slow, and generally a willow shore, into which we could push our boat, and protect ourselves from the wind and waves. Immediately upon the signal being given, the hinder boats used to make towards the foremost, and endeavour to anchor (as we called it) close together ; and in this manner we passed the night very pleasantly amongst ourselves, making amends for the loss of friends and distant situation. In the daytime our attention would be taken up by watching the sawyers, and keeping the boat from dashing against the trees on the shore ; for this current is so amazingly rapid, and its course so winding, that the stream is continually washing one side or the other ; and this, added to the overflowing of the banks, which draws the water to the sides, renders the navigation of these curves very dangerous. We have oftentimes had all hands to the oars, striving with all our might to keep her off from the trees which grew on the banks, the slightest touch against which would have endangered her safety ; and in this manner we have tugged till we have almost been induced to give the matter up, as the boat would not be perhaps above three feet the whole way from the

trunks of the trees ; and all that we were able to do was to prevent her getting nearer. In this manner the trees would seem to fly past us ; but no sooner were we got to the termination of the bend, and to the point of land which formed a convex shore, than we were carried with the same rapidity across the stream to the opposite banks, possessing the main river in safety. However, no sooner than arrived there, we had to go through the same exercise again. This was very fatiguing ; and in fact could not be incessantly supported ; but after a little while we acquired a method of keeping her in the middle of the stream, by watching the moment she began to vary, and thereby verifying the vulgar proverb, " A stitch in time saves nine."

Monday, May 1st.—By daylight this morning we heard the busy hum of men murmuring around us, and by the noise made in the different boats we found it was time for us to be taking our departure ; accordingly the signal was given, and instantly the cables were slipped, and the boats pushed off from shore, and once more we hailed the rising sun, whose joyful rays were scattering health and peace over these delightful and majestically romantic regions. Our course was where the stream carried us through the most intricate mazes of innumerable islands, which are scattered in such profusion throughout this king of rivers, and whose banks are covered with a perpetual verdure, tending at once to charm the imagination, and to feast the eye. On the river itself (whose course we could never see two miles before us, and it would sometimes appear to be terminated by the land, where it would take a sudden turn, and double its mazy round) were multitudes of wild fowl of various descriptions. Here

we could see the pelicans of the wilderness flying in long trains through the air, and at last lighting on the surface of the river, proud of their double element. The eagle and the vulture we could often see perched on the lofty barren tree, looking about seeking what they might devour. But what attracted my attention the most was the enormous alligators which we saw basking in the sun on logs near the shore. Here they would expose themselves, lying with their monstrous jaws wide open, and apparently asleep ; but not absolutely so, for on our approach to them they would flounce suddenly into the water, and scatter the foam to a considerable distance. These animals are so well known to naturalists as to need no description : suffice it to say, that their appearance is enough to terrify the eyes of any beholder ; and dreadful is their rage when attacked *in the water*, which appears to be their natural element ; but on the land an escape from them is easily made, as their motion is very slow, and they are incapable* of making a short turn.

This afternoon we passed two bluffs within ten or twelve miles of each other, which appear eligible places for towns, particularly the latter one, which we passed about five o'clock. It is situated in the bend of the river, which just here is very narrow ; it, therefore, could command the pass of it, if at any time in the event of a war it might be necessary. This place is called Prudhomme in Hutchins's Map. A few miles below this place

* These animals make a tremendous howling, or rather bellowing, when they first come out of the dens, or at the approach of bad weather. I have heard them continue this during the whole night, and that in such numbers, that it has been dismal to hear them.

we put ashore ; the country quite overflowed ; no venturing out of our boat ; the longest setting poles we had would not reach the bottom : and yet the lofty *cotton-trees* with which the banks are lined did not appear to be at all diminished in height, although so considerable a part of their body was under water. In the morning,—

Tuesday, May 2nd,—about an hour after sunrise we passed another bluff, which we suppose is called Middle Cliff in Hutchins's Map. Here we saw a barge coming up the river. We hailed it ; but, they being Spaniards and not understanding us, or else from being on the opposite shore, they did not seem to show a disposition to come to us. These barges are a kind of keel-boats, which are rowed by fifteen or twenty men, and by keeping close to the shores they avoid the strength of the current, and sometimes are helped on by an eddy or counter current. They perform a journey of a few miles a day, which makes a passage by water up the stream very tedious and fatiguing. At sunset we came to Chickasaw Bluffs, called in Hutchins's Map, the Cliffs of Margot, and which are about 130 miles from New Madrid. You will see by my noting down every elevation of land, how remarkable these appearances are, and what a flat country we have been passing through. I may also observe, that all the high lands are on the *eastern* side of the river ; and I don't recollect that there was a single eminence of any kind on the western side through the whole course of the river : the land sometimes *appears*, but it is scarcely elevated above the bed of the river, and does not continue for any great length.

At Chickasaw Bluffs there are about five or six families settled, who may be called half-Indians ; that is, they

are persons who, in habit and manners, are nearly allied to them, and have generally married into the Indian families. It is situated at the mouth of Wolfe river, of which it forms the southern bank. The Spaniards had lately a fort here, which they preserved merely to keep their chain on this river; but on account of the treaty lately entered into with America, they agreed to evacuate all their forts on the eastern side of the Mississippi above the latitude of 31° north. And in consequence of this agreement, they had destroyed this fort and erected another on the shore immediately opposite, and which was overflowed when we were there, or nearly so. This tract of country belongs to the tribe of Chickasaw Indians, a warlike race, and one that preserves a good understanding with America, which the latter is obliged to keep up by presents sent annually to them. Several of them appeared on the banks, and we went up amongst them and walked about the place till dark. They were very much dissatisfied with the Americans, they said, for not sending them their accustomed presents (which, owing to some delay, had not yet reached them). This was the place where they should have been landed; and they said they had been waiting for them a long time, and that every boat they saw they imagined to contain them. We assured them that it was not a designed neglect on our part (for I amongst the rest was obliged to pass for an American) that they had not arrived sooner; but that it must have depended upon some unforeseen cause, which would be fully explained when they arrived. They appeared satisfied with our excuse, and told us, that the reason that made them so impatient was, that they were going to war with the Creek Indians, a party of whom

had approached within a few miles of one of their villages, and inhumanly killed some of their tribe. From what I could gather amongst them, they were not all unanimous in this quarrel; for one of their chiefs (who spoke tolerable English) told me that it was a proposition of some of the young warriors, and that the old men had scarcely given their approbation. There always did subsist an inveterate enmity between these two tribes; and this fresh depredation of the Creeks has only served to revive a former grudge.

These Indians are a well-made, handsome race of men. When we approached the shore, there were a number of them sitting on the banks, and others standing at the top of the hill, enjoying the mildness of the evening and the beauty of the setting sun; others, perhaps attracted by the presence of the boats, whose motions they watched with an attentive eye. However, none of them came to us, or seemed to stir from the place where we first saw them; which we observing, went out to them as soon as we had made fast our boat, and they received us with every mark of friendship and attention. The chief part of them were dressed in printed calico shirts, which (together with what they call a breech-clout) formed the whole of their dress, except a pair of mockasons, which served them for shoes. These mockasons are made of deer skins, which are smoked instead of tanned, and are thereby rendered very soft and pleasant to the feet; they are sewed together at the top with the sinews of the deer, and are finished oftentimes in a very curious manner with wampum and porcupine quills. They soon offered us the pipe of peace, of which each of us having smoked a whiff or two, our introduction to them was com-

pleted, and they began to trade with us, and show us every thing worthy of observation in the place.

Soon after we had been here, we observed a boat coming across the river from the fort opposite, and presently Don Grandé (who with twelve men commands that place) came on board us, attended by two or three of his soldiers, we supposed for the purpose of inspecting our passports. I had advised our party, (and to which all the other boats agreed,) if he behaved insolently to us, to treat him with contempt, or punish him for his impudence, well knowing that the Spaniards had no right to exact this submission on our part; but that if he behaved civilly, we should not only return it, but show him our passports, at the same time giving him to understand that it was not done through compulsion, but to avoid the disagreeableness of a contest between us. As they were mostly Kentuckians with us, who are all men of a fiery temper and independent spirit, and who cannot bear the least thing which appears like submission to an oppression, there was very little difficulty in bringing them to this measure. However, there happened to be no cause of alarm, as our haughty Don (as we conceived him) proved to be a very sociable sort of a man, and we were so far pleased with him, as to make him stop supper with us, and after spending a very pleasant evening, he retired across the river to rest. He informed us that the reason the Spaniards had burnt the fort* was, that they had built it merely on sufferance from the Indians, and that on condition of demolishing it if ever they should

* The Spaniards had burnt and destroyed the fort on the American side of the river, prior to their relinquishing the place, according to treaty.

evacuate it, so that no other power might obtain possession. The next morning,—

Wednesday, May 3rd,—we started from this place about nine o'clock. A great many Indians were assembled on the shore to see us depart; others had taken their guns, and were gone a hunting in the woods. The wind was rather high, and we had not floated above an hour, ere we were obliged to put ashore again. We stayed near an hour, and the wind abating a little, we floated again. At night we came to again on the signals being made, and the next day,—

Thursday, May 4th,—we passed the river St. Francis, about seventy miles from C. Bluffs. Our sight of its mouth was cut off by some islands, among which we were floating at the time we passed it, so that we don't know exactly the time when we came to it. This is but a small river, and rises a little way in the interior of Louisiana; and the banks just above its mouth are made a resort for hunters, who often meet here both in going out to hunt and in returning with their prey. It is an old encamping ground, and on that account is made use of by the hunters to get their things ready for their journey into the country.

Saturday, May 6th.—We put ashore this evening, not far from the river Arkansaw. This is a considerable stream, and has its source not far from Santa Fé, in the province of New Mexico. It runs through an immensely rich and fertile country, and is said to be navigable for batteaux for 700 or 800 miles. The Spaniards had a fort about ten or twelve miles up this river, for the purpose of defending the trade carried on with the Arkansaw Indians. An inundation of the Mississippi some years

back caused the evacuation of this fort, and the establishment of another on the north bank, about thirty-six miles higher up. This fort is still kept up, and the Spaniards are giving great encouragement to emigrants to settle there. The Arkansaw discharges itself into the Mississippi by *two* mouths, the upper of which is called Rivière Blanche, from its receiving a river of that name, which is said to be navigable 600 miles, and the soil through which it runs, equal in quality * to any in the Mississippi. The Arkansaw is about 110 miles from the river St. Francis.

Tuesday, May 9th.—About half-past two o'clock in the afternoon we passed the Yazou river, about 160 miles from Arkansaw river. This stream rises high up in the Cherokee country. It runs through a very fertile soil, and empties itself into the Mississippi by a mouth about 100 yards wide. About sixteen miles up this river the French had formerly a settlement, but it was destroyed by the Yazou Indians in 1726. This tribe of Indians is now entirely *extinct*. This is the river which has been the bone of contention between the United States and the Spaniards: the latter claiming the country to the southward of it, as being included in the province of West Florida, of which the Yazou was the northern boundary; and the Americans maintaining, on the other hand, that the northern boundary of West Florida was the 31st degree of north latitude. A great deal might be said in support of both claims, though I think most in favour of Spain; however, as by the late treaty the Spaniards have agreed to give it up, it will be needless to enter into an unprofitable discussion of its merits.

About five o'clock we came to the Walnut Hills, called the

* Hutchins.

Yazou Cliffs, in Hutchins's Map, twelve miles from Yazou river. Here there is a strong fort kept up by the Spaniards. It is an irregular fortification, occupying a great part of the hill on which it stands, which is very high and steep. Here we ought to have put ashore to show our passport. But though we submitted to this degradation in going ashore at the forts established on the *Spanish** territory, yet at this place (which was a fort established within the American lines, and unlawfully kept possession of by the Spaniards, in contradiction to the treaty lately concluded between the two countries) we were determined to assert our own rights, and not comply with so unjust and humiliating a demand : accordingly, we floated by without taking any notice of them ; and we had scarcely got opposite to the fort, ere we had a gun fired at us, which was a signal for us to heave to ; but we, regardless of their threats, continued on, and by the rapidity of the stream were wafted out of their sight ere they could load another piece to bear upon us. The other boats in our company who were behind, fearful that they should pay for our contempt of the summons, obeyed the signal, and rather than run the gauntlet of their pieces, put ashore. We put ashore a little below this place, and were soon joined by another of the boats which had made its escape from under the fort.

Walnut Hills is a beautiful situation for a town, and an advantageous one for a fort. There are two forts at this place, one of them commands the other, being situated upon an eminence behind it. The few houses which are scattered around it, and the green bank on which they stand, surrounded with flowering, verdant, and lofty trees,

* That is, on the *western* side of the Mississippi.

presented at once a picturesque and romantic appearance to our eyes, fatigued with the uniformity of the prospect to which we had for so many miles been witness.

The weather being very fine, and the moon shining very bright, and there being very few sawyers in the river just here, we determined upon proceeding on our journey, in order that we might get to the *Grand Gulf* by the middle of the day, as being the most proper time for passing that dangerous spot. Accordingly, having taken each of us a nap, we got up about half-past twelve, and having got our boats into the middle of the stream, one part of our company kept their appointed watch, and the other retired again to rest, and the same morning, about eleven o'clock,—

Wednesday, May 10th,—we came to this perilous vortex, which is the most dangerous place in the whole navigation of the Mississippi. The river here is thrown up with great impetuosity against the bluff point of a rock, which opposes its broad side to the current, and makes it revolve upon its own course in numberless whirlpools, into one of which if a boat gets, she is carried round with an astonishing rapidity, like a *whirligig*, and becomes totally unmanageable; so that if the direction of the vortex happens to be towards the rock, she must inevitably be dashed to pieces. The river then makes a very sharp turning round a point of land directly opposite the rock, and runs a course immediately contrary to the one it before pursued. The way to escape this place, and pass in safety through its terrors, is to keep the boat exactly in the middle between the current which runs towards the rock, and the eddy or counter-current which runs near the point; for, in all these


places there is a counter-current runs along the opposite shore; into which if you happen to get, you are carried back, and have to go through the same trials and difficulties a second time. This difficulty, then, we endeavoured to surmount; and to do it required our constant presence at the oars, and a steady attention to the commands of the person who undertakes to conduct her, and who is upon the top of the boat, observing the course of the numerous currents. Happily, two of our company had passed it before, and were, therefore, somewhat acquainted with its navigation. To them we consequently entrusted the management; and by their steady attention, we had no sooner arrived at the critical point, than we shot through it all in safety, like an arrow from a bow, or like a body precipitated from a mill-tail. Grand Gulf is about fifty miles from Walnut Hills.

At one o'clock, P.M., we came to Bayou Pierre. This is a little stream which rises up in the district of the Natchez; and upon the head waters of which, there are some settlements, which form part of that district; there were also two or three plantations at its mouth. Here we went ashore in our canoe, and got some eggs and milk, which were acceptable to us who had been so long deprived of every luxury of this kind. The land here was very nearly overflowed, being very few inches above the level of the river. The inhabitants told me they never remembered the river so high. We did not stop here many minutes, as our boat passed by as swift as lightning, and we were obliged to make the best of our way to catch her before she arrived at the *Little Gulf*, which is a place, in its situation and effect, somewhat like the Grand Gulf, only on a smaller scale. Its

danger also is scarcely any in high water; but when the river is low there are some strong eddies which ought to be avoided. It is about ten or twelve miles from Bayou Pierre. The next morning,—

Thursday, May 11th,—about twelve o'clock we arrived at Natchez, sixty miles from Bayou Pierre. This is the capital of the district which goes under this name. It is situated upon a high hill, which terminates in a bluff at the river, and consists of about eighty or ninety houses scattered over a great space of land. The streets are laid out upon a regular plan; but there is so much ground between most of the houses, that it appears as if each dwelling was furnished with a plantation. There is a fort upon an eminence near the river, which commands both the town and the Mississippi; but it is in a ruinous condition, and could not be defended against a regular attack. The governor of this place is Don Manuel Gayoso de Lemos, a man who (for a Spaniard) is *said* to have behaved tolerably well in his office; *but let every one speak well of the bridge which carries him safe over*. On our approach to the shore, we had the pleasure of beholding the American colours flying on the banks. Agreeably to the treaty entered into between Spain and America, the former agreed to evacuate and give up all the country to the eastward of the Mississippi, which was to the north of the 31st degree of north latitude, in which the district of Natchez is included; and the commissioners for determining the precise point where the 31st degree of latitude commenced, and for running the line which was to be the boundary between the two countries, were (agreeably to the treaty) to meet at Natchez; and as soon as it was ascertained what forts were to

the northward of that line, they were to be evacuated. Mr. Ellicot, the commissioner on the part of America, had been here ever since; and as it was pretty well known that Natchez would fall to the side of the Americans, Lieutenant Pope was sent down with a party of men to take possession of the fort as soon as the Spaniards should evacuate it. The latter had, some little while back, shown a disposition to give them up, and had actually removed several of the cannon down to the boats appointed for their reception, both at this fort and at the Walnut Hills; (which was still more to the northward;) and they had even destroyed the fort at Chickasaw bluffs, as I have before mentioned. But on the appearance of a rupture between the United States and France, (with the latter of whom Spain was in alliance,) they suddenly countermanded these orders, and the governors were instructed to replace the cannon, and put the garrison in a posture of defence, and not deliver up the forts. It was under this aspect of things that Mr. Ellicot and Lieutenant Pope arrived; and instead of finding an amicable disposition in the governor to give up the fort, and to proceed to the determining of *the line*, he absolutely refused the former, and by unnecessary delays protracted the latter. However, as Lieutenant Pope could not go counter to his orders, he landed his men, and, marching them up the hill, took possession of an eminence immediately opposite the fort, and there, hoisting the American flag, he encamped his men; and it was in this situation that I found him when I was introduced to him by Mr. Ellicot, whom I had known at Pittsburgh. He informed me that Gayoso sent to him, soon after he had been there, to strike his colours, saying, he had no right



to hoist them on the Spanish territory. On his refusing so to do, he threatened to send and cut down the flag-staff; but on Lieutenant Pope's assuring him that he would defend his colours to the utmost, Gayoso gave up the contest.

This district has been settled principally by English and Americans; and though the country was given up to the Spaniards in 1783, the proportion of Spanish inhabitants is very small. To persons brought up under a form of government to which the English and Americans have been accustomed, the Spanish government must be an intolerable yoke. They depend in all their civil and criminal affairs upon the *whim* or *caprice*, *favour* or *folly* of an upstart Spaniard who is set over them as their governor, and who, through pique or malice, or in a fit of drunkenness or insanity, has it in his power to sport with the lives and property of those persons over whom he is placed for the ostensible purpose of protection. Abusing this trust in the most shameful and despotic manner, as they often do, even to hazard of the safety of the inhabitants, it is no wonder that the people composing the district received with pleasure the news of the territory being delivered up to the Americans, and that they should soon get rid of their haughty masters, under whom they had suffered so many hardships and inconveniences; and that they saw, with regret, mixed with the greatest resentment, a disposition on the part of Spain to violate the treaty, and not to deliver up the fort, together with the country. This just resentment was carried to a great pitch whilst I was here, and broke out in open acts of violence several times; and at last proceeded so far as to induce the governor to retire into the fort, and to call upon all the

people attached to his person to come to him, and defend themselves against the designs of these evil-disposed men (as he denominated them). There were about *a dozen* flocked to his standard; as to the rest of the district, they surrounded the fort, and kept his *Excellency* prisoner there near a fortnight, and would not let him come out at last, till he had signed articles of capitulation; which articles* are as in the annexed note, and clearly indicate how determined the inhabitants were to maintain their just rights. To particularize all the incidents which took place at this period relative to this subject would fill a volume; they are all sufficiently related in the reports of the Secretary of State to the Congress.

* These propositions were:—

“1st.—That the inhabitants of the district of Natchez (who, under the belief and persuasion that they were citizens of the United States, agreeably to the late treaty, have assembled and embodied themselves) are not to be prosecuted or injured for their conduct on that account, but to stand exonerated and acquitted.

“2nd.—The inhabitants of the government aforesaid, above the 31st degree of north latitude, are not to be embodied as militia, nor called upon to aid in any military operation, except in case of an Indian invasion, or for the suppression of riots during the present state of uncertainty, owing to the late treaty between the United States and his Catholic Majesty not being carried fully into effect.

“3rd.—The laws of Spain in the above district shall be continued, and on all occasions be executed with mildness and moderation; nor shall any of the inhabitants be transported as prisoners out of this government on any pretext whatever; and notwithstanding the operation of the law aforesaid is hereby admitted, yet the inhabitants shall be considered to be in an actual state of neutrality during the continuance of their uncertainty, as mentioned in the second proposition.”

The town of Natchez is situated in north latitude $31^{\circ}33'46''$,* and west longitude $6^{\circ}5'57''$ from Greenwich: the whole district may contain about 5,000 inhabitants. The houses are chiefly framed buildings; but, though this country has been settled so long, there is all that inattention to neatness, cleanliness, and the comforts attending thereon, that there is in a country just cleared. I have seen houses in this place (and those possessed by persons assuming a degree of consequence in the country) scarcely furnished beyond the first stage of civilization, when a few boards nailed together have served for a bedstead, and a mattress covered with a few blankets for a bed, when there has been scarcely a chair to sit down upon, or a table to place anything on, but everything in the greatest confusion and disorder about the room. This, to be sure, is not universally so: on the contrary, I have seen others fitted up in the neatest manner possible; but then in the greatest plainness, without any of those luxuries which decorate even the cottages of our English farmers. The climate† is delightful, though in the

* Ellicot, in his Journal, says $48''$.

† According to Mr. Ellicot's Journal, on the 1st December, 1797, the thermometer was as high as 78° , but he does not mention the time of the day.

On the 2nd, at sunrise, it was at 50° , and fell to 47°					
—	3rd,	ditto,	ditto	22° , and rose to 35°	
—	4th,	ditto,	ditto	18° ,	33°
—	5th,	ditto,	ditto	20° ,	37°
—	6th,	ditto,	ditto	18° ,	39°
—	11th,	ditto,	ditto	40° ,	60°
—	12th,	ditto,	ditto	52° ,	75°
—	13th,	ditto,	ditto	60° ,	75°
—	14th,	ditto,	ditto	63° ,	75°
—	22nd Jan., 1798,	ditto	ditto	67° ,	76°
—	23rd,	ditto,	ditto	22° ,	46°
—	24th,	ditto,	ditto	18° ,	49°
—	26th,	ditto,	ditto	66° ,	76°

summer I think somewhat too warm, the thermometer being here in June as high as 107° . Ice is not known here, and snow but seldom, and then very thin, and soon goes off. Its situation is pleasant, being the uneven surface of the top of a high hill, which commands a fine view of the Mississippi for a considerable way, as well as of the country. From the point next the river you may look upon the borders of the water, and see the alligator prowling along amongst the bushes and brambles which are in the bottom, and at times uttering the most dismal howlings. These animals, whose hides are impervious by a musket-ball, are sometimes caught by the Indian by a manœuvre truly his own:—He goes armed with a strong hickory stick, about two feet long, barbed at each end, and which he holds in the middle as tight as possible. In the other hand he takes some article of food to attract them, and to induce them to open their enormous mouths to obtain it, and which the Indian holds out to them; but no sooner does the alligator make the attempt to seize it, than the Indian snatches *that* arm away, and presents the *other* furnished with this double dart. The alligator, unconscious of this, closes his mouth upon his supposed prey; and unable to extricate himself or open his jaws, the Indian drags him to shore, amidst the applause and acclamation of the spectators who stand by admiring the daring act. The roads about here are very good, considering there is no attention paid to them; the usual mode of travelling is on horseback; and as there are no public-houses, a spirit of hospitality is kept up between all neighbours. This hospitality, which is only shown amongst neighbours, or the friends of neighbours, I shall more fully treat upon, when I come to touch upon the

manners and customs of the Americans in general ; (for Americans I still consider these people ;) though I shall touch upon the state of society and mode of living when I come to take leave of the district. There is a great deal of *cotton* raised in this district, which is sent down the river to New Orleans : it is of the nature of Georgian cotton. There are several *jennies* erected in the neighbourhood, in order to extricate the seed from the cotton. There is one immediately in the town on the banks of the river, belonging to Minor and Scott, worked by two horses, which will give 500 lbs. of clear cotton in a day. They have one-eighth part for their trouble. The seed-cotton loses three-fourths of its weight by jenneting. Very good tobacco and rice is raised here, but in no considerable quantity.

There are two or three places here which go under the denomination of Taverns, and where you may get accommodated with board and lodging. I put up at one of them, (at which there was a billiard table kept) and paid my landlord a dollar per day, which was enormous, considering the fare ; for provisions are not very plenty in this province, at least, if we judge from the prices. *Imported* articles must come high ; but I think it possible that their markets might be better supplied than they are ; in fact, I have no doubt but they *will* when the American mode of government comes to be administered, and the persons and property of the inhabitants to be protected, and full encouragement given to industry in all its forms. Looking forward to this time, we may pronounce this district to be the most flourishing in the south-west territory ; and the town of Natchez far to excel every other on the banks of the Mississippi. The

land around is of an excellent quality ; and by the near port of New Orleans, it has an easy mean of exporting its produce, and receiving in return such articles of foreign manufacture as may be most in demand. Land in the country is sold for about a dollar an acre : a five-acre *lot* close to the town sold for 150 dollars. Dr. Watrous (our fellow-passenger) bought a lot of 150 acres of uncleared land near the town for four dollars per acre, and it was thought cheap. The article of land must nevertheless depend in its value upon its relative situation and advantages, as well as upon its quality. Upon the whole, I think this an excellent place for a person to settle in, (when it comes under the government of the United States,) if he can bring himself to give up the advantages of refined society ; though I don't know that this remark is more particularly needful here than in all young countries : on the contrary, I know several persons here, both Spanish and English, whose conversation and company have been interesting and amusing. Slavery is permitted by the Spanish government, and no doubt will be continued by the Americans, till they have adopted some measure for the utter annihilation of it from the country.

Of the Spanish government in itself I shall make no remark till I relate *all together* my opinion on it from New Orleans. I shall only mention a circumstance relating to myself, which will set in a strong point of view the oppressive and domineering conduct of the Spanish governors, as well as inform you of the hazardous situation I have been in.

The secretary of the government (one Joseph Vidal, a Spaniard) had purchased of me the remainder of those goods which I had, after trading with the Indians, amount-

ing to about 680 pésos ;* these he was to pay me for *immediately*, but when I called on him for the money, he offered me in payment a *certificate* to nearly the amount. These certificates are a species of paper-money drawn by the commanders of the different forts on this river on the treasury at New Orleans, and are paid away to workmen, soldiers, &c., instead of money, and are received by the merchants as such ; so that they are a kind of bank notes † received upon the faith of government, though it must be observed that oftentimes there is no great sum of money in the treasury, and these certificates are returned unpaid, so that they generally bear a discount : and this discount is proportioned to the degree of confidence put in the prospect of getting the money. It happened that they bore at this time a discount of 12 per cent., and yet this unreasonable rascal wanted me to take them at their *full* value, which I, of course, refused, and wished him to pay me in *cash*. He at first seemed to hesitate, and said that he would try if he could get it discounted ; but on my calling again, said he was under the necessity of telling me I *must* take it as cash ; and as I found all means to induce him to the contrary were of no avail, I appealed to the governor. I have before hinted that the governors are all, directly or indirectly, concerned in a contraband trade, and I had every reason to believe that he was connected with Vidal, in this instance ; I therefore did not much flatter myself with the prospect of success. However, I went to him, and told him my tale : as a boy at school would go to the master, and complain of the improper conduct of any of

* A peso is about a dollar.

† Similar to what our navy bills used to be formerly.

his companions, and if the master thought proper he would punish him ; otherwise, he would dismiss him with impunity. Gayoso listened to me very patiently, and as he had heard it all from Vidal prior to my relation, he had made up his mind what decision to give ; he said that the certificates were a *legal* tender, and that I could not refuse them. I was surprised to hear this notorious falsehood from a person so high in office ; and finding that there was no prospect of obtaining justice here, I told him my determination of carrying the case before the Baron de Carondelet at New Orleans, who is the Commander-in-Chief of the province of Louisiana, and for this purpose wished him to give me his decision in writing, with his hand and seal annexed. At this he seemed very angry, and threatened me with what he would do if I made an improper use of the papers, or went to misrepresent them. I soon appeased him, or at least apparently so, when I set forth the justice of my claim, and my indifference about his anger ; and I afterwards asked him how I might obtain his decision. He told me that the formal way was to draw up a state of the case in the manner of a petition praying for redress, and that he would write underneath his decree. Accordingly I drew up a paper, and delivered it to him. He did not seem to like the contents of it ; for though I had taken care to flatter his vanity by some expressions in it, yet he evidently saw that the case was stated too clearly to admit of a doubt of the justice of it ; and, I believe, he was almost ashamed to annex so shameful and illegal a decision to it as he has done ; particularly when he understood that I had consulted Mr. Ellicot and Lieutenant Pope on my plan, and that they had determined to sup-

port me in my claim, at least, so far as regarded the carrying that part of the treaty into effect which I had there claimed. Finding no notice taken, in his decision, of the *law* which made these certificates a legal tender, I went to him and asked him to point out, and *show* me the law by which he was guided ; and I never shall forget the looks of the man at this (what he called impertinent) question ; for, wondering at my assurance, and threatening me with the horrors of the Callibouse* if I any longer disputed his authority, he laid his hand upon his breast and told me that *he* was the law ; and that as *he* said the case was to be determined. I could not help laughing at the insulting effrontery of the man when he made this speech, at which he seemed more than ever enraged ; and, I believe, had it not been for the neighbouring situation of the American commissioner and commander, together with the general revolting spirit of the district, that I should have been hurried off to immediate imprisonment, if not to the *mines*. The anger of a Spaniard is so implacable and malicious, that he will leave no stone unturned to accomplish his revenge, even to the act of assassination. Under this idea, and by the advice of my friends here, who had known instances of their hateful temper, I always went guarded, and at night never slept but with a pair of pistols under my pillow ; for as my door faced the road,† it was an easy thing to break it open, and (hurrying me down the river) to elude all search which would have been

* The Callibouse is the state prison.

† My bedroom door opened immediately on the road. For you should bear in mind that the houses here are built somewhat after the Chinese style,—seldom more than a ground-floor, and the doors of most of the apartments opening from the street.

made for me. However, this did not deter me from pursuing my cause, for I was determined on having justice if it was to be found in the country ; accordingly, I went to the governor once more, and told him that I wished to *protest* against receiving the certificates. He said that he could not enter any protest against the king's money, as he called it. I then told him that I wished Vidal should pay the money in *his presence*, and that I had appointed Mr. Ellicot and two other witnesses to be present at the transaction. At this he began to grow angry, and told me I must not pretend to dictate to him what to do ; and that he should suffer nothing of the kind. However, I pursued my claim in due form and order, and sent in a petition to see whether he would have the assurance to deny me this just and reasonable request. I was present when it was delivered in, and heard him mutter something about the *stubbornness* of the American character. In that petition I prayed that Vidal might be ordered to discharge his debt before the governor, and that three witnesses of my own appointment might be present thereto, agreeably to the provision made in the treaty. However, as soon as the petition was read to him, he called in three of the officers of his household, together with Vidal ; and after explaining the nature of the business to them, opened a kind of court for the decision of the case. I asked him if the witnesses I had nominated were not to be present ; and he, answering in the negative, addressed himself to me, and asked me whether I was willing and ready to receive the money. Upon which I turned to him, and said, " Sir, you are making a mockery of justice ; I shall not answer you till my witnesses are admitted : " and immediately quitted the court, leaving

them to brood over their own iniquity, and to stare with stupid astonishment upon each other. The next day I called to see what they had done with my petition, and found the governor's refusal of the prayer of it written at full length at the bottom, together with a minute of my having so precipitately left the court. I immediately communicated the contents to Mr. Ellicot, and he* assured me that he would send the particulars in his next dispatches to the secretary of the United States; and inform him with how little ceremony the Spaniards treat the American citizens; and with what indifference they can break the most solemn treaties.

The boat which brought me down here having sold all its flour at this place, and the proprietors intending to return to their own homes through the wilderness, I was obliged to look out for another conveyance to take me to New Orleans, which is about 300 miles down the river; and from that place I had no doubt but that I should meet with a vessel to take me round to New York. This circumstance detained me here till

Thursday, June 1st,—when a boat laden with cotton (among which was some belonging to myself, which I had purchased here) being ready to go down, I waited on *my old friend* the governor once more, in order to get my passport to proceed to New Orleans. I had been advised by several of my friends, not to trust myself any farther into the Spanish territories; they assuring me that there was no doubt but that Gayoso had represented

* Mr. Ellicot was as good as his word; for I found (on my return to the United States) that his representation of my case formed part of the report of the Secretary of State to Congress on the affairs of Spain.

the whole of my conduct in the strongest colours possible to the Baron de Carondelet ; and that I might be taken by surprise there, when I should be deprived of the aid and support of the American commissioner and commander, to whom I have great reason to think that I owe my personal safety. I communicated these suggestions to Mr. Ellicot, and he allowed the full force of them, but at the same time assured me, that in case of any attack upon my person, he would hold Vidal as an hostage till I was safely returned. Under this confidence I applied to the governor for my passport, which he immediately made out, glad enough (I believe) to get rid of so troublesome a visitor : it was couched in these words,—

“NATCHEZ, 29th de Mayo, de 1797.

“Concedo libre y seguro pasaporte a Don Francisco Bailly para que pase a la Neuva Orleans por Agna. Pido y encargo no se le ponga embarazo.

“MANUEL GAYOSO de LEMOS.”

We had got all our things ready in the morning, and about half-past five in the afternoon we started. The boat belonged to one Mr. Douglass ; he had bought it on purpose for the freight of cotton to New Orleans, which is one dollar and a half per bag ; sometimes it is two dollars. A bag contains from 150 to 250 pounds ; and a boat will carry 200 or 300 bags, according to its size.

Soon after we had left the shore, we quitted that high country which borders immediately upon the Natchez, and got once more into the flat level country we had been so long used to in our passage down the river. We did not proceed far this evening, for we *came to* at sunset, a few miles below the town. However, the mosquitos which infest the shores were so tormenting, that we could

obtain no rest; we therefore determined rather to risk the dangers of the navigation in the night than suffer so intolerable a vexation; for it must be observed, that they do not frequent the middle parts of the river, but merely near the shore, under cover of the trees. We therefore broke loose from our moorings about twelve o'clock, and (having set our respective watches) we continued to float all night, and when morning appeared,—

Friday, June 2nd,—found ourselves considerably advanced in our journey, and by sunset the same day came to Red River (Rivière Rouge). This is a considerable stream, and has its name from its waters being of a reddish colour, and which are said to tinge those of the Mississippi at the time of the floods. Its source is in New Mexico, and runs about 600 miles. Black River (Rivière Noire) empties itself into this stream about thirty miles from its confluence with the Mississippi. The famous Ferdinando Soto ended his discoveries and his life at the entrance of this river, and was buried there. Near seventy leagues up this river the French had a considerable port called Natchitoches. It was a frontier on the Spanish settlement, being only twenty miles from the fort Adaies. The French fort was garrisoned by a captain's command. There were forty families settled here, consisting mostly of discharged soldiers, and some merchants* who traded with the Spaniards. Up this river the traders who are bound to New Mexico proceed, as it saves them a considerable journey by land, and is the nearest stream that enters that province, running through the whole breadth of Louisiana.

* Hutchins.

About a league below the mouth of the Red River, we came to the Chefalaya. This is the uppermost mouth of the Mississippi, and after running through one of the most fertile regions in the world, discharges itself into the Bay of St. Bernard, a considerable distance to the westward of the other mouths of the Mississippi. This is a current which must be carefully avoided by boats coming down this river, and they must take care to keep well over to the left shore; for, if they get within the suck of the stream, (which flows into this channel with great rapidity,) they will be driven into a country from which it is probable they would not escape. There being no settlements on this branch, and the country being entirely overflowed at the time of the floods, the boat must be driven out to sea, or it must stop till the river has fallen, and the waters retired within its banks; and then you may escape *by land* to the nearest settlement, but your property must inevitably remain where you left it, as it would be impossible to bring it back against the current, unless at an enormous expense and labour. The stream pours down this channel in the greatest confusion imaginable, marking out (almost at every inundation) a *fresh* course; and in many places its navigation is quite obstructed by logs, trees, &c., which are brought down in great quantities.

Having passed this place in safety, we came the next day, about noon,—

Saturday, June 3rd, to Point Coupée, where there is a large settlement scattered along the right shore. We came to on the opposite bank on account of wind. This is the spot where, it is said, some Canadians diverted the course of the river by digging a new channel, whence its

name. This report I shall take notice of when I come to treat of the Mississippi in general.

From Natchez to this place, the banks on each side of the river present the same uniform appearance to which we had been accustomed in the upper part of it; but from hence to New Orleans, the country at intervals began to assume a more cultivated appearance, particularly after we had passed the next settlement, which was Baton Rouge, and where we arrived the next day,—

Sunday, June 4th.—This settlement is on the Florida side of the Mississippi, and there is a fort kept here for its protection by the Spaniards. The commandant hailed us to come ashore and show our passports; accordingly, we sent our canoe with a couple of men to the fort, who soon returned again with the commandant's* permission to pass. We put ashore this evening at sundown in the mouth of a little creek where the dry land appeared on each side. I went out with my gun in the canoe to the land, and had a most pleasing ramble in the woods, through one of the richest countries the eye ever beheld. I could not venture far, as the evening was much advanced, I therefore directed my steps in the most speedy manner to the boat, and having tarried all night, in the morning—

Monday, June 5th.—about sunrise we started again; and from this place to New Orleans, our eyes were continually feasted by the prospect of one uninterrupted chain of plantations, scattered at unequal distances along the shore. This immense river also, which was higher here than the surrounding country, was kept from overflowing these plantations by a *raised bank*, called a *levée*, which

* We were now within the Spanish territories.

formed a fine broad walk immediately on the border of the river, and in many places was planted with orange and lemon trees. This happy mixture of nature and art was very enchanting to the sight, particularly as it presented a scene so totally new and unlooked-for by us. In this delightful spot, where every thing seemed to be produced without any effort of art, I could not but fancy myself as wafted along the gentle bosom of the *Nile*, and that this fertile and inundated country was in the immediate vicinity of Grand Cairo, or some other opulent city. I could scarcely imagine that I was on the surface of a river which had flowed nearly 3,000 miles, and scarcely beheld the face of man, much less washed the feet of his habitation, and that had barely 200 miles farther to go ere it would be for ever lost as a name in the great body of the ocean. This appearance of cultivation I afterwards found was not extended into the *interior* of the country, but merely on the *borders* of the river; for all the country *behind* these settlements is still overgrown with woods and possessed by wild beasts; and there is seldom an instance of there being one settlement formed at the back of another, except in the immediate vicinity of New Orleans.

As the weather was remarkably serene and mild, and no danger to be apprehended from the sawyers, the river being too high, we determined to proceed all night, particularly as we should not only avoid the tormenting and distracting harass of the mosquitos, but at the same time enjoy one of the finest landscapes the pen can describe, or the imagination conceive,—this was no less than the addition of the moon to set off this enchanting scene, and whose effect we had before thought incapable of being

heightened. The gibbous moon had just then peeped above the tops of the highest trees. All nature seemed to join in the solemnity of the scene; the rapid current, beating with impetuous violence against the half-overflowed trees, roared like a torrent along the *raised shore*; the deep-toned bullfrog, and the still more deeply thundering alligator, returned their hollow sounds in many a hideous and dismal howl. This noble river too, whose bosom, smooth and unruffled, reflected the yellow beams of the goddess of night, contributed itself, in a great measure, to the majesty and magnificence of the whole. Every where that I cast my eyes I beheld marks of the industry of man, which formed a happy and a striking contrast of the works of art to those of nature. On either side he had formed bounds for this immense body of water, confining within its own banks a stream which, in its long circuitous course, had inundated the whole country, and saying to it, "Thus far shalt thou come, and no farther." On the shore, the little huts of the hard-working slaves, crowded together in one corner of the plantation, formed a striking, though a detested, contrast to the splendid mansion of his unfeeling master. "Alas!" cried I (turning myself from this reflecting scene of woe, and addressing myself to yon shining luminary)—"alas! fair goddess, how many revolving courses shalt thou measure out, ere thou shalt behold this horrible distinction lost and forgotten? * * * * *

You must excuse this rhapsody; but, as the season seemed peculiarly fitted for reflection, and you know I have ever held the slave-trade in the utmost abhorrence, you must be content to receive such thoughts and observations as immediately strike me at the time. How-

ever, I shall not detain you longer on this point, for it would be impossible to describe all the different scenes and landscapes which continued to present themselves at this silent hour of the night, and which were hurried from our sight by the rapidity of the stream almost as soon as observed.

Having thus gratified my curiosity for a few hours, during a time that the rest of my companions were buried in sleep, I retreated under the cover of the boat, and laid me down to rest ; and about an hour after sunrise the next morning,—

Tuesday, June 6th,—we arrived at New Orleans, the capital of the province of Louisiana, and a place of considerable trade. New Orleans is built immediately on the banks of the Mississippi ; and on the eastern side of it, there is an eddy which runs along the bank, which is of advantage to boats stopping here ; because, as soon as they get into this, they are in no danger of being carried down by the rapidity of the stream, which is sometimes the case if they do not get into the eddy *in time* ; and in such an event they may be carried a great way below the town, without being able to return. Having fastened the boat to the shore, we were soon waited upon by an officer for our passports, which, as soon as we had delivered up, we were suffered to depart where we pleased ; and happening accidentally to meet a gentleman whom I had seen at the Natchez, I went with him, and took up my lodgings at the same house that he did. Our first entrance into the house was through a hall which looked immediately into the street, and which had curtains to supply the place of doors. I was then shown into a large saloon, where there were thirty or forty

gentlemen at breakfast, with all the doors and windows wide open, for though it was so early it was very hot. Here I recollected a number of faces that I had seen before in my travels, and which to meet again in an unknown and foreign country was a double satisfaction to me. Having been informed that I could be accommodated with board and lodging here, I took my seat at the table, and joined them in their repast. As they were chiefly Americans who boarded here, our fare and accommodations were a great deal in the American style, which, as I have already described, I shall not farther trouble you with. The house was kept by Madame Chabot, an Irish lady, but who had married a French man in this country, by whom she had an agreeable daughter about sixteen or seventeen years old. After breakfast I called on Mr. Clarke, and delivered him my papers relative to Governor Gayoso and Vidal, in order to lay before the Baron de Carondelet, the Commander-in-chief of this province. This he promised me to do; but at the same time informed me that there was such a good understanding (as he called it) kept up between the governors of the different districts, and they so supported each other in all their measures, whether right or wrong, that it was improbable that I should obtain satisfaction. However, as I was determined to try how far Spanish rascality and injustice could proceed, I requested him to comply with my request, and press for a speedy decision, as I was in haste to proceed homewards. This he said he would do, and I then left him and went round the town, to take a view of its buildings, forts, &c., &c.; and as it will be unnecessary to try you with the observations of every day, I shall sum up the whole by this general description.

New Orleans is laid out upon Penn's plan ; that is, with the streets, (which are rather narrow) crossing each other at right angles : it contains fifteen rows of streets from north-east to south-west, and seven rows in the opposite direction ; and the whole area of the city may be about three hundred acres. Owing to the irregularity of the fortification which surrounds this city, all the streets are not of an equal length. The whole area is not entirely built over, as many squares on the north-west end of the town are void of houses. The principal site for buildings is as near the water as possible, as being more convenient for trade, &c. ; and houses on this spot will let for more money than those farther back from the Mississippi. Fronting the river, and at an equal distance from each end of the town, there is a public square, which is left vacant, as well for the purpose of beauty and ornament, as to expose to view a church which stands at the farther end of it. This church is a plain brick building of the Ionic order ; and is fitted up within in nearly the same style that all Roman Catholic chapels are. It no farther attracts the attention than as being the best edifice in the place. Not far from the square in which this church stands is the government-house, a plain edifice, in which the governor of the province resides : it stands facing the water at the corner of a street ; it is built (as many houses in this place are) with open galleries facing the street, and is surrounded at the back by a garden. At an equal distance from the church, on the opposite side, and immediately facing the water, is a magazine of stores : it is capable of holding sufficient for the defence of the place ; but, at the time I was there, was very ill supplied. At the

eastern corner of the city are the barracks, which are built facing the river: they are a plain building, and appeared capable of holding a considerable quantity of men, though the exact number I could not understand. Immediately adjoining the barracks is the convent, which is another very plain edifice, and holds about thirty or forty nuns. A number of the female children of the inhabitants of this place are sent here to be educated, and many of them are so fond of the mode of living, &c., that at the proper age they have voluntarily taken the veil. This convent takes up a great space of ground, and has a large garden adjoining to it. I have already observed to you that the Mississippi is kept from overflowing its banks by reason of a mound of earth thrown up along the shore. This mound is called a *levée*, and varies in its height from two to three, or even four feet, according to the surface of the shore. It commences at Détour des Anglois (English Turn), a distance of eighteen miles below New Orleans, and is carried along the banks of the river as far as the German settlements, which are about thirty miles above New Orleans, making in the whole near fifty miles. This bank is of considerable width in some places, so as to form a handsome broad walk, and is kept up by the owners of the plantations, who are answerable for any mischief caused by the breaking down of the banks, if through their neglect. These *levées* are continued, if necessary, round the whole of the plantation, so that in time of high-water the surface of the surrounding river is considerably above the plantation, which seems to lie in a bed within it. This was the case when I was at New Orleans, and the whole of this city was considerably *below* the bed of

the river. The levée which formed its boundary here was a handsome raised gravel walk, planted with orange-trees ; and in the summer-time served for a mall, and in an evening was always a fashionable resort for the beaux and belles of the place. I have enjoyed many an evening's promenade here, admiring the serenity of the climate, and the majestic appearance of this noble river, which seemed to roll in silent dignity at our feet, inattentive to the idle gabble that was uttered on its banks.

The space between the levée and the front row of houses was occupied as a kind of market by that miserable class of men who even here swarm in great numbers,—I mean, the unfortunate blacks. Here they were suffered to fix their little stalls, and retail the several articles they had to vend, whereby to raise a scanty pittance, to enable them to make their miserable lot more comfortable, and to bear up under the frowns of their haughty master. But, alas ! even out of these, very few could I find but what were obliged to account to their master for the profits of the day, and would lie down at night without finding their condition at all meliorated for their exertions, and with every hope of rising in the world by their own activity and diligence for ever shut from their view.

The fortification with which this city is surrounded consists of five bastions regularly laid out, and furnished with banquette, rampart, parapet, ditch, covered way, and glacis ; the curtains are nothing more than a line of stockades about four feet high, which are set at a small distance from each other, which renders them penetrable by musket-ball. This stockade is furnished with a banquette *within*, and a trifling ditch and glacis *without*, which extends round the whole of the city, bastions

and all. The side next the river is open, so that there are only three sides fortified. In the middle of each curtain there is a small redoubt or ravelin, furnished with three, four, and five embrasures ; but none of them have more than two pieces of cannon mounted, which are six or eight pounders. The bastions, which might be rendered very strong, have each sixteen embrasures ; that is, four in each face, three in each flank, and two in the gorge to face the city. However, they are very badly mounted with cannon, and from what I could understand, they could not remedy this matter, as there were no cannons in the place but what were in the bastions. The western bastion had but three or four pieces, the north-western bastion the same quantity, the northern bastion had about five or six, and the eastern bastion had its full complement, besides the same number in the covered way. What this can be for I cannot conceive, that they should leave the other bastions almost defenceless, and crowd the cannon into this quarter of the city. It could not be that they apprehended an attack from below, because the river is well defended farther below, and no nation would ever think of attacking it *against* the stream. On the contrary, they *had* reasons to apprehend an attack from above, as appears from the proclamation of the governor when I was there ; and the only work which defended this opening was the southern bastion, in conjunction with a little redoubt on the levée. This bastion was furnished with about twelve pieces of cannon, and was also furnished with a counterguard, and had traverses in the covered way. The redoubt on the levée had five pieces of cannon mounted ; but of all this force, not above ten pieces could be brought to bear upon any

body of men descending the stream ; and if they effected a landing on the open levée, the bastions would then be of no service. There is another redoubt furnished with four pieces of cannon on the levée, and facing the magazine, which place I suppose it was meant to defend. All the cannon in these last-mentioned places are about twenty-four pounders. Upon the whole, I think this a place which might easily be taken ; and to put it in the most ready and expeditious mode of execution, I would recommend the landing of a body of men under cover of the night on the open levée, or marching them round to the back of the town, (which is quite defenceless,) to carry the place by assault : either of these methods would have the desired effect, and the more readily if it were undertaken by the Americans or British, as the inhabitants (who are mostly from these two countries) are heartily tired of the Spanish yoke, and would favour any attempt which could be made *effectually* and *perpetually* to relieve them from it. These observations on the fortifications of this place were made at the extreme hazard of my person ; for, in ascertaining the exact position and direction of their different parts, (which I did by walking often round the bastions, and taking their bearings with a compass,) I would be sometimes ordered away by the sentinel, and sharply reprimanded for approaching so near the works : and had he suspected my motive he would instantly have seized me ; and the drawings I had made of the place would have been sufficient to have convicted me, particularly in this country, where villany and oppression take place of honour and justice. However, in spite of all their suspicious vigilance, I found means to obtain a complete plan

of the place ; and I brought it away with me in the crown of my hat, as being the most likely place to escape the search which is sometimes made on persons* departing from the city.

There are six gates to this city, the two most considerable of which are those on the levée ; the next in point of importance are two at the back of the city, one of which leads to Lake Ponchartrain. These two are defended by a small breastwork, which, by the bye, is a mere apology for a defence. There are two other avenues leading out of the city on the south-western side ; but as they are very small, (having nothing but a plank across the ditch,) I shall only mention them. These gates are formed of wood, but are not solid ; *i. e.*, they consist of a kind of railing, so that these also are not proof against musketry. They are shut every night at nine o'clock, after which time they are not opened without difficulty ; and at this hour it is ordered that no one is to be seen about the streets unless he has a licence from the governor : though, except in the case of negroes and servants, the hour is extended till eleven, and after this time all persons seen about the streets are stopped by the guard and detained till morning.

The houses are generally framed buildings, and are raised about seven or eight feet from the ground, in order to make room for the cellars, which are on *a level* with the ground, as no buildings can be carried on below its

* My reasons for being so particular on the state of the fortifications was the idea of an immediate rupture between the Americans and Spaniards, which was much expected at that time. And I should have been happy to have served the former at the expense of the latter.

surface on account of the height of the surrounding water. The upper part is sometimes furnished with an open gallery, which surrounds the whole building, though in the streets this is often dispensed with. It affords an agreeable retreat in the cool of the evening in this warm climate, and is much more refreshing than within doors. The house in which I boarded had one of these galleries, which was shaded by some trees growing in the garden, and under cover of these we used to take our tea in the evening. Sometimes our party would be enlivened by the addition of some musical instrument, accompanied by a song from the daughter of our hostess, who entertained us with some French and Spanish airs in the highest perfection.

Having thus much treated on the *external* appearance of this place, let me now descend to the *internal* condition of it, and endeavour to describe those different shades in the state of society which serve to distinguish one set of men from another, and enable us to pronounce a favourable or unfavourable opinion of their customs and manners. In all societies where a number of men from different countries have met together, each will naturally endeavour to persevere in that line of conduct, or in those habits, to which he has been used in his own country; and though a promiscuous intercourse may induce each to deviate a little from his accustomed habits, &c., yet it will be a long while ere they form *one* perfect character under which the whole community may be classed. The inhabitants of this place are a mixture of English, Irish, Scotch, American, French, and Spanish; and though the four former may be ranked under one general head, and form by far the greatest body of the people here, yet the

two latter will form a distinct character, of which the Spanish are the *least* considerable. The characteristic traits in each of these nations are nearly the same as in the mother country, though somewhat altered by the natural progress of assimilation, owing to such a promiscuous combination of different characters. The climate, too, may have some influence upon the mind, and induce it to comply with little deviations from accustomed usage, for the sake of ease and comfort. Amongst the most prominent traits I may reckon an unconquerable disposition towards indolence and a love of ease, united to its never-failing attendant,—slavery. It will be observed, that this vice kept pace with our advancement to the southward; and that in proportion as men are exposed to the scorching rays of the enervating sun, they have ever been induced to compel another part of the human race to administer to their ease and indolence by toil and labour; so that to these miserable creatures the observation of Virgil may be applied, “*Sic vos non vobis*,” and that in its fullest extent.

As to the state of society, and connexions which the inhabitants form with each other, it must be observed that all these new-settled places, and, in fact, almost all colonies, are filled with adventurers, who leave their own country for the sake of profit and advantage to themselves; and who, most of them, look upon the spot where they happen to reside as a mere place of passage, where they hope to realize a fortune, which they intend to enjoy in their native country. In such a state of society, then, we are not to look for any improvement in the arts or sciences, nor for any progress in refinement or the arts of civilization. It will be sufficient if they preserve those

which they brought from their own country, and do not *degenerate* instead of advancing. In none of these places which I have been in have I found those settled habits of society which are to be found in even every village in my own country, where a long residence in a place, and a descendance from a train of old-established ancestors, induces man to go on in the old jog-trot way of his forefathers. Here they are more of a speculative and enterprising turn; and what connexions are formed amongst each other are generally those of interest or immediate pleasure, and lose much of their relish for want of that duration and stability which alone can give a true zest to friendship, or, I think, to even common acquaintance. To be sure, there is an advantage attending this *to the traveller*, and that is, that there is not that difficulty of admittance into society in these places, which there is in old-established countries. A person who does not behave himself improperly, and has the slightest knowledge of any individual in the place, will find an easy admission into all companies. But, then, as acquaintances are easily formed, they are as easily dissolved, and that perhaps with as much *sang froid* as they were made. This must necessarily be the case when there is such a promiscuous succession of strangers as there generally is in new countries. That there are some who call themselves *settled* in this province, I will admit; and as these have families and connexions in the place, their habits are consequently moulding down into a settled form; but the great bulk of the inhabitants are of the description I have been mentioning. Which of the two states of society is the most acceptable to a resident, I leave you to judge; and in the meantime I shall draw

your attention to another object connected with the same subject ; this is, their mode of living, as it respects cleanliness, provisions, &c., &c.

With respect to the former, they are kept within proper bounds by the nature of the climate: for, not only are they obliged to be neat and clean in their apparel, &c., but they are deprived also in their houses (by the same kind agent) of many articles which, in a more moderate climate, are a harbour, not only for dirt and filth, but for vermin of every sort. Their houses are generally built of wood, and boarded very plain in the inside, and made very open, that there may be a free circulation of air; consequently they avoid all the inconvenience and expense of paper, carpets, fires, curtains, and hangings of different kinds. The bedrooms are fitted up in the same plain style, and are furnished with nothing but a *hard-stuffed* bed, raised very much in the *middle*, and covered with a clean, white sheet ; and over the whole there is a large gauze net (called a *bear*), ^L which is intended as a defence against the mosquitos, and serves tolerably well to keep off those tormenting creatures. On this sheet (spread upon the bed, and *under* the net) you lie down without any other covering, and (if it be summer-time) with the doors and windows open, so intolerable is the heat of the climate. During several days when I was here, the thermometer was at 117° in the shade.

The dress of the inhabitants is also correspondent to the furniture of their houses : being clothed in the lightest manner possible, and every one in the manner which pleases him best, there is not (in these new countries) that strange propensity to ridicule every one who devi-

ates from the forms which a more established society may have prescribed to itself ; but every one, in this respect, "doeth that which is right in his own eyes." Some will wear the short linen jacket of the Americans ; others, the long flowing gown, or the cloak of the Spaniards : some, the open trousers and naked collar ; others, the more modern dress of tight pantaloons and large cravats : some, with the white or black chip hat ; others, with the beaver and *feathers*, after the manner of the Spaniards : and so in respect to all other minutiae* of dress.

As to articles of provision, their markets are excellently supplied from the numerous plantations on the banks of this noble river, and that at a moderate rate ; though I am informed, that they are not under good management. Articles of fruit, such as oranges, lemons, melons, pananas, pine-apples, nuts, &c., &c., are in the greatest profusion, and are vended about the streets by the negroes.

The liquor which is chiefly drunk here is claret ; which mixed with water is the common beverage. Spirits, punch, and bottled porter are also much consumed. Weak punch is a favourite liquor in all warm countries.

The trade of this place consists principally in the exportation of deer and bear skins, beaver furs, cotton, lumber, rice, and various other articles, which are produced on the plantations up the river. The skins they get from the Indians, who bring them here to trade, and in return receive guns, powder, blankets, &c. At the time I was here cotton sold for fifteen dollars per cwt., which was a low price : in general it fetches from twenty to twenty-five dollars. The articles of importation con-

* The same observations apply to the ladies.

sist chiefly of such goods of European manufactory as are in most demand amongst the inhabitants, or intended for trade amongst the Indians. This latter is a very profitable employment. There was a gentleman of the name* of Nolin, an Irishman by birth, who boarded in the same house with us, who had followed it for some years : he was at that time preparing for another expedition, and intended in a short time to proceed up Red River, on his way to Mexico. He told me it was a life of extreme fatigue, and very difficult to be procured, as the Spanish governors were very jealous whom they admitted to this privilege ; and it would be impossible to carry it on without their permission. His mode of carrying such articles as he takes out is in little barrels, which are placed upon pack-horses, three barrels upon a horse : and in this manner he will travel for hundreds—I may say, thousands—of miles through the woods of America, bartering with the Indians as he goes along, and receiving in return skins and furs, or wild horses. These horses (of which there are plenty in the Apalouza country, and in the province of Mexico) are caught in a most curious manner, and which can only be effected with success by those who have been used to the practice. A person is mounted on a fleet horse, round the neck of which a rope is tied ; and the other end of the rope is formed into a noose, and this he holds in his hand ; he then rides into the woods where a number of these wild horses are assembled together, and

* It is right to inform the reader, that alterations of common Irish names, as Daily for Daly, Nolin for Nolan, arise neither from editorial negligence, nor from want of clearness in the manuscript. Mr. Bailly distinctly wrote them so, and probably saw them so written.—ED.

singling out one of them, rides at full speed after him, and when he has come within the required distance, throws the noose over his head ; immediately the horse which he is riding stops, and the *other* horse, when he has attained the full length of the rope, is thrown on his back by the violence of the jerk. The rider then gets off his horse and immediately mounts the other animal, and continues to ride him at full speed till he is fairly overcome, and properly broken in : he is then delivered to the trader, who drives him quietly before him along with the herd he has collected to whatever place he pleases.

But to return to the subject of my letter. The article of lumber which I have mentioned as one of their exports, is procured in the following manner:—The owners of the saw-mills in this neighbourhood send a number of men up the Mississippi at the proper season, to cut down timber on its banks. This timber, which is very fine and in very great abundance, and which is had for the mere trouble of fetching it, is cut down before the floods descend, after which time, and when the banks are overflowed, they go up and without any difficulty bring all their logs (which are now floating) to the river, where they form a raft of them, and let them drift down the stream to the saw-mill. At that place a number of men stand ready with ropes and hawsers to tow the raft to the shore, where it is cut up into planks, scantlings, &c. However, great care is necessary in conducting it down the river, as it is totally unmanageable when it gets into a strong current : and if suffered to come near the shore, the raft would inevitably be broken to pieces ; or if it got within the suck of the *Chefalaya*, it would undoubtedly be lost for ever. The saw-mills are built on

the banks of the Mississippi, and are turned by the stream flowing over its banks: so that they never work but at time of high floods, at which period they continue going day and night till the waters fall again.


There is but one printing-press in this place, and that is made use of by the government only. The Spanish government is too jealous to suffer the inhabitants to have the free exercise of it; for, however strange it may appear, yet it is absolutely true that you cannot even stick a paper against the wall (either to recover anything lost, or to advertise anything for sale) without its first having the signature of the governor or his secretary attached to it: and on all those little bills which are stuck up at the corners of the streets you see the word "Permitted" written by the governor or his agent.

As to the diversions of the place, they consist principally in billiards, of which there are several tables in the town. This practice I presume they have adopted from the Americans, who (in the southern part of that continent) follow this amusement very much. They have a playhouse, which is rather small. It consists of one row of boxes only, with an amphitheatre in the middle, which is raised above the pit, and over the whole there is a gallery. The plays are performed in French, and they have a tolerable set of actors. The inhabitants are also musical, but this lies chiefly among the French. The gentlemen of the place often perform in the orchestra at the theatre: in fact, there is no other music there but such as they obtain in this voluntary way.

Here I had an opportunity of noticing the observance of the Sabbath as it is kept in a Roman Catholic country. The fore part of the day was kept in a religious perform-

ance of a few forms and ceremonies, which were carried on under the roof of the church. That being ended, and with it the duty of the day, you everywhere observed the marks of hilarity and cheerfulness. Scarcely had the priest pronounced his benediction, ere the violin or the fife struck up at the door, and the lower classes of the people indulged themselves in all the gaiety and mirth of juvenile diversions. Singing, dancing, and all kinds of sports were seen in every street; and in the evening the play-house and assembly-room were thrown open, to crown this scene of dissipation. I observed that this unbending of the mind from all worldly cares, and suffering the gay dispositions of the heart to supersede those of a more reflecting nature, took very much with the lower sort of people, and induced them to look forward with the highest pleasure for Sunday—particularly amongst the negroes, who in *this* country are suffered to refrain from work on that day. Here, arrayed in their best apparel, forgetful of the toils they had endured the preceding part of the week, and let loose from the hand of their master, they would meet together on the green, and spend the day in mirth and festivity. Here they would appear with countenances illuminated and beaming with happiness, as if they were enjoying themselves in the midst of their friends and relatives, and had never been snatched from their own country by the cruel hand of the Christian.

Now I am upon this subject, I must not forget to mention the procession of the *host*, which I had an opportunity of seeing conducted in this place. It was on the 15th June, which is kept in Roman Catholic countries as the *Corpus Christi* day. The morning was ushered in by a general bustle through the streets, which



indicated that there was something remarkable going forward in the city. On my approach to the church I found all the *associations* in the place under arms, and ready to attend the procession. The streets through which they were to move were purposely planted with green boughs and bushes on both sides, and strewed with a kind of gravel. A mixed multitude of men, women, and children surrounded the church, waiting the coming out of the sacred treasure. Not wishing to be involved in the rabble, I took my station at some little distance, and in a short time I had the satisfaction of seeing the gentlemen make their appearance. A few soldiers went first to clear the way; next to these followed the ecclesiastical multitude, consisting of priests of different kinds and in different habits, carrying tapers, crosses, and all the instruments of idolatrous superstition, and conveying the host, which was carried on a kind of bier dressed round with flowers and trinkets, not unlike our May-day garlands. After this came the bishop, walking in solemn state under a canopy supported by half a dozen priests, and scattering his *fruitless* blessings around on a gaping multitude. Close to the bishop followed the Baron de Carondelet, the governor of the province, together with his suite; and at the close of these a party of horse and foot to preserve order, and to keep off the rabble which followed behind. Several gentlemen of the place who wished to attend the procession had procured tapers, and in this manner formed part of the retinue—lighting the bishop in mid-day as he went along. By this means they observed the whole of the manœuvres, and were preserved from mixing with the multitude. I had one offered me; but as I understood that I could not leave my

office when I pleased, but *must* continue to the end of the procession, I rather chose to take my chance of the day. Besides, as I did not feel a disposition to show any outward mark of respect to their superstition, I was willing to leave myself at liberty to depart whenever I found myself insulted by the mob for my non-compliance with their expectations ; for it is the *mob* alone which enforces that outward respect which is shown by every person as the host passes along : nothing being to be apprehended from those under the government. Accordingly, when the host was fairly out of the church, and all down upon their knees in the streets, with their hats off, and gazing with a stupid kind of astonishment on the holy wafers, I silently stole up by the side of the governor, and walked round with him all the way, putting myself in a manner under his protection ; however, no kind of insult was offered to me for my keeping on my hat when they were all kneeling at the appointed places. Now, such is the perverseness of human nature, that when I found this was the case, I was induced to do that *through compliment*, which nothing could have induced me to do *by force*. The procession continued to move very slowly to the sound of musical instruments through several of the streets ; at the corner of every one of which the host was set down, and some few ecclesiastical tricks being performed by the bishop (the people all kneeling), he scattered his blessings round upon the multitude, and then proceeded on to the next corner, where the same ceremony was repeated. At the same time the houses on each side were lined with visitors, who strewed flowers upon the head of the venerable bishop as he went by, and kneeled to the host as it passed along. At length

the procession having made a circle through the streets round the church, arrived at the same point again ; which having entered, some little ceremony was performed, and the day was left to be spent in mirth and merriment.

New Orleans* may contain about a thousand houses. It is one hundred miles from the sea *down the Mississippi* ; but across the country *by land* it is not more than seven leagues. Owing to the rapidity of the current, vessels are a long while in coming up here. There is a fort, called Balize, at the mouth of the river ; but I am informed that it furnishes no defence to it. The tide ascends but very little way up the channel of the Mississippi, owing to the rapidity of its current. The banks of this river are well settled for a few miles below the city ; but after that there are no plantations of any consequence.

When I first arrived here, it was my intention to have proceeded to New York by sea, and I expected to have found some vessel here bound to that place ; but when I arrived, there was not a single vessel in the harbour, neither was there any expected immediately. This must give you but a poor idea of the commerce of this place ; however, you must observe that it was only a *temporary* stagnation, and arose from the peculiar situation in which the Americans found themselves with respect to Spain, on her refusing to give up the forts, and also from other

* Hutchins says that it was regularly laid out by the French in the year 1720, and that its latitude is 30° 2' north.

It is a very unhealthy place, owing probably to its low situation, and to its frequent communications and intimate connexion with the West India Islands, through which means it is often troubled with epidemic fevers.

circumstances at the time, which served to prevent ships from entering this port, among which I may mention the presence of an English frigate at the mouth of the river, which gave a pretty good look-out after vessels making an enemy's harbour. However, a schooner arrived here in a few days, which intended to proceed to the Havana, and from thence probably to New York; but as this was not determined upon, I could not embrace the opportunity; otherwise I should have very much liked to have seen this famous place, which was so gallantly defended, and as gallantly reduced, in the year 1762, under Admiral Pocock, and which was very impolitically given up again at the peace of 1763.

Finding, then, that there was no prospect of getting to New York by sea, unless I waited a considerable time at this place, I resolved upon returning thither by *land*; and, as there was a party soon to set off through the *wilderness*,* I determined to embrace the opportunity of going with them. The distance across the country was near two thousand miles, the greatest part of which was uninhabited, being mostly among the Indian nations, some of whom were continually committing acts of hostility against the Americans. In our progress through this *desert*† country, we were to be cut off entirely from society, save the few scattered Indians we might meet with by the way, without a path to direct us in our course, and obliged to take the provisions with us which we might be likely to want in this long and troublesome

* Returning through the wilderness, is going through that uncultivated tract of land lying between the United States and the Spanish settlements, and which is inhabited solely by the Indians.

† Deserted by *man* only.

journey. However, as I had had some little specimen of rough living, I did not look forward with so much dread of the difficulties and dangers of this mode of travelling as my companions, some of whom had never experienced it before, and I the rather embraced this opportunity *now*, as the season was advancing when this place began to be very unhealthy. Accordingly I purchased a couple of horses; (one to carry myself, and the other my provisions, &c.;) and having laid in a store of biscuit and beef sufficient to last me till we got to the Natchez, through which place we were to pass, and having furnished myself with a *hunter's** dress, proper for travelling through the woods, I held myself in readiness for my companions. But before I take leave of this place, I promised to give you some general observations on the noble and majestic river which I have just descended.

The Mississippi rises nearly in the centre of North America, in about the 50th degree of north latitude; though its exact course has never yet been ascertained, it is the most westerly boundary of the United States, and divides that country from the provinces of Spain which lie on the western side of this river. By the late treaty between Great Britain and America, commissioners have been appointed to ascertain the head of the river St. Lawrence, and to draw a line from thence, due west, till it strikes the Mississippi. As the commissioners have set out on their expedition we may soon expect to hear some accurate account from this unexplored part of the world. It is said to flow three thousand miles before it discharges

* A hunter is a white man, who follows nearly the same mode of life as the Indians, and lives by hunting the deer, bear, &c., &c.

itself* into the ocean. Very little of its course is known above the falls† of St. Anthony, which lie in latitude 45° ; but from the information of travellers, it flows, after it has precipitated itself over that rock, with a clear, gentle current, receiving many tributary streams in its course, the most considerable of which is the Missouri. Here it assumes a very different appearance, and would scarcely

* Its general direction is from north to south, and moves in a continued serpentine course throughout.

† They received their name from Father Lewis Hennipin, a French missionary, who travelled into these parts about the year 1680, and was the first European ever seen by the natives. The whole river, which is more than 250 yards wide, falls perpendicularly about thirty feet, and forms a most pleasing cataract. The rapids below, in the space of 300 yards render the descent considerably greater; so that, when viewed at a distance, they appear to be much higher than they really are. In the middle of the falls is a small island, about forty feet broad, and somewhat longer, on which grow a few craggy hemlock and spruce-trees; and about half-way between this island and the eastern shore, is a rock lying at the very edge of the falls in an oblique position, five or six feet broad, and thirty or forty long. These falls are peculiarly situated, as they are approachable without the least obstruction from any intervening hills or precipice, which cannot be said of any other considerable falls perhaps in the world. The country around is exceedingly beautiful. It is not an uninterrupted plain, where the eye finds no relief, but composed of many gentle ascents, which, in the spring and summer, are covered with verdure, and interspersed with little groves, that give a pleasing variety to the prospect. A little distance below the falls, is a small island, of about 1½ acre, on which grow a great number of oak-trees, almost all the branches of which (able to bear the weight) are, in the proper season of the year, loaded with eagles' nests. Their instinctive wisdom has taught them to choose this place, as it is secure, on account of the rapids above, from the attacks either of man or beast.

be taken for the same river; in fact, it ought, in point of propriety, to lose its name here, for the Missouri is by far the *most considerable* stream of the two, being *navigable* upwards of two thousand miles from its mouth, and how far above that its source may be, has never yet been ascertained. Certain it is, that even at that distance, it is a considerable body of water, very muddy in its quality, and rapid in its course, descending like a torrent through a vast uninhabited and desert country; and when it arrives at the Mississippi (which it enters at nearly right angles), it shoots like a rapid across the stream, rendering turbid its limpid waters, and scarcely deigning to mix with so opposite a companion. Here they are borne down together through one of the richest and most beautiful countries the sun ever shone upon, equalling the famous plains of Egypt in fertility, and the climate of Italy for mildness and temperature. On the point of land where the Missouri enters, the Spaniards have lately formed a settlement, called St. Louis, and have taken a great deal of pains to encourage the Americans to settle there; induced by the temptations they held out, a great many emigrated thither, and still continue to do so, to the great retardation of the settlements in the western parts of the United States. However, there is one thing which is likely to make amends for this temporary evil, and that is, that such Americans as *do* emigrate thither will take with them all their local habits and dispositions, and that unconquerable spirit of independence which characterises them. By this mean they will be sowing the seeds of revolt which must sooner or later break out in these provinces, when the Spanish government begins to exercise that despotic tyranny over them

which forms the basis of her support, and the seed of her ruin ; and if they shake off the yoke of this political monster, it is evident the inhabitants will put themselves either under the protection of the Americans or English, either of whom would be able to drive out these proud rulers, and thereby enlarge the reign of liberty and justice. The town stands on an eminence, and is about 160 miles above the Ohio ; there is another town, called St. Genevieve, about sixty or seventy miles below, which is not quite so large as St. Louis. There are a few straggling plantations also at other places on both sides of the river, and Mr. Hutchins makes the number of fencible men in the several villages on and near the Mississippi, in the year 1771, as follows:—

At St. Louis	French	415
„	Negroes	40
At St. Genevieve	French	208
„	Negroes	80
At other places	French	300
„	Negroes	230
		—
Total . . .		1273

Since that time, however, the number must have been *considerably* increased ; for the Americans have taken a great deal of pains to settle the Illinois country, (or that tract of land through which the Illinois river runs,) and the Spaniards to do the same on the western banks of the Mississippi ; so that the tract of land lying on the Mississippi, between the Ohio and Missouri, may be looked upon as in a fair prospect of being soon inhabited. But after the junction of that river, (the Ohio,) how different

the appearance! not a single settlement (save the few I have noticed) till you arrive at the Natchez, a distance of a thousand miles! Some remark on this part of its course is what I am now going to offer; and in doing this I shall confine myself to such things as fell under my own observation, and relate them as I first noticed them.

The first thing which attracts the attention of a traveller on entering the Mississippi, is the extreme turbidness of its waters. This I had been led to expect, and its appearance answered my expectations; but when I came to try the experiment which has been hackneyed about in all the descriptions of this country, I must confess I was disappointed; viz., "That in a half-pint tumbler of this water there has been found a sediment of one inch." I tried it several times, and scarcely ever found it more than one-eighth of an inch, if so much.

The next objects worthy of attention are the enormous poplar-trees which line the banks of this river. It is called the cotton-tree by the natives, from the quantity of downy substance (like cotton) which is scattered from its fruit-stalks at the time of a high wind. It is the *populus balsamifera* of Linnæus. They are of an amazing height, and of great thickness at the bottom, and cover the banks of this river, particularly at the lower parts of it, for a considerable distance. We have oftentimes made fast to their trunks when we have *put to* at night, and have endeavoured to touch the bottom with the longest setting poles we had, but without effect, and yet their height did not appear at all diminished; on the contrary, they appeared (even in that unfavourable situation) as remarkably tall trees.

But what gives the greatest pleasure and delight to a

mind fond of such scenes, is the labyrinth of islands amongst which you are incessantly floating, and that with such rapidity, that you are hurried from one to the other without scarcely having time to observe the beauties of either. Sometimes the course of the river will appear to be stopped by their intersection with each other; but no sooner are you arrived at the apparent point of obstruction, than the river makes a short turn, and whirls you round into a view of quite different scenes and prospects. The perpetual verdure which reigns in this climate, and the different tints which the setting sun reflects from these scattered islands, make many of these wild and majestic scenes bear the appearance of enchantment. There is one spot a little below the mouth of the Ohio, which, on account of the quantity of islands which are interspersed in it, is emphatically styled, "Hundred Islands;" for it is said that from one point of view you may behold that number.

This river appears of different widths in different places: in some parts I have observed it upwards of five miles wide, and in others (particularly at Grand Gulf, and where the other bluffs appear) it may not be more than a quarter of a mile wide. This inequality depends (as I conceive) upon the nature of the soil through which the river runs; for though in general it is a light, loose mould, yet even this may differ in degrees of tenacity, and in its capability of being undermined. I have already remarked to you, that the banks in many places have been observed to fall in, and the river to make encroachments on the land; and I also remarked to you the cause of this appearance. If this were suffered to continue long without any counterbalance, the whole country would

soon be an immense lake ; but it is widely ordered that what is gained so suddenly in one place is made up by the steady hand of time in the encroachments which the land makes upon the river in another place. The encroachments which are made upon the land, are always made in the *concave* part of the course of the river, where the stream flows with violence against the side, and precipitates whole acres to one sudden ruin. The slow advances of the land in return are made on the opposite, or *convex*, shore ; and this part is always observed to be overgrown with low willow-trees, which are favourable to the growth (if I may so term it) of new ground, and the retention of mud and other substances which are continually floating down the stream. In process of time this projection becomes of a considerable length, and in a course of ages, by the action of the stream against its sides, may be cut entirely through, and either form an island, or leave the other channel perfectly dry. That many such changes as these have been observed, (even during a person's lifetime,) I have the testimony of several witnesses who can well remember the course of the river, very different from what it is now, and one of whom pointed out to me several places which he remembered very different from what he had observed them some years ago ; and the appearance of the country justified his observations. So that it would appear as though the bed of the river were continually varying ; in fact, I would hazard a bolder conjecture, and suppose that in the course of some centuries it may have altered its course so effectually, as to run in no one part over the same tract of country that it did formerly. As to what Charlevoix says of some Canadians cutting through a neck of land at

Point Coupée, I think that, before a belief can be founded on an assertion of that sort, it ought to be attended with some sort of evidence. To be sure, I saw what they called the old bed of the river, which is no otherwise to be distinguished from the surrounding land but by a little excavation of the ground, and the lowness of the trees; but then it is no more than what I have remarked in *other* places where the river has evidently deviated from its course. For, setting aside the labour of the undertaking, (which, I am very sure, people in this country would not unnecessarily throw away,) the thing could not be attended with any material advantage; for the current is so swift, that I am certain a boat could get round to the opposite point before a man could put a spade in the ground, or even push his boat to the shore. I lay stress likewise upon the incredulity of the natives, who know too well the folly of such an useless enterprise to give credit* to the report.

There is another thing in which I would endeavour to set you right, at least if you have formed the same idea which I had previously entertained; and that is respecting the eddies or counter-currents of this river. I had always conceived them to flow with a motion *against* the regular course of the stream, nearly as strong as the stream itself. These are the words of Winterbotham:—

* Winterbotham, with the most barefaced assurance, after relating the account given by Charlevoix, adds,—“Several other points of great extent have, in like manner, been since cut off, and the river diverted into new channels.” This, perhaps, in course of time, may be called good evidence of the fact, and will descend to posterity hand in hand with Charlevoix’s idle tale. The truth is, that these deviations are the work of nature, and not of art.

“The current of the Mississippi is so strong, that it is with difficulty it can be ascended ; but this advantage is in part compensated by eddies or counter-currents, which are found in the bends close to the banks of the river, which run with *nearly equal velocity against* the stream, and assist the ascending boats.” Now the fact is far otherwise ; for instead of these eddies having a *current*, they are seldom more than stagnant water ; or if they have a motion, it is almost imperceptible. If a boat gets into one of these eddies, she will appear (to a boat going down the stream) to ascend with a great degree of velocity, and for the same reason that the trees on the bank appear to move ; but this is easily accounted for, and is nothing more than a deception of sight. Therefore it is a mere *negative* advantage that these places present, as they only assist the ascending boat so far as to prevent the general current from driving the boat downwards.

A great deal has been said upon the practicability of obtaining boats which might be brought to work against the stream, by means of some mechanical force, which would save the expense of manual labour ; but, however far such a scheme might be able to be carried into execution, it is certain that the *present* trade down the Mississippi does not hold out encouragement enough to any to induce them to follow the scheme with success ; for (about the latter end of last year) some Dutchmen undertook to build a boat upon this construction—the propelling force consisted of two large wheels on each side, which were partly immersed in the water, and formed somewhat like the waterwheel of a mill, and were turned round by eight horses. He first of all had four horses ; but finding *large* animals inconvenient, (as they moved

under deck,) he changed them for four pair of *small* ones. This boat passed us when we were wrecked on the banks of the Ohio; and appeared to go with prodigious swiftness with the stream. They were going down with her to New Orleans, expecting to have a good freight in coming up with her again. When we were at Natchez, she had just arrived from that city, having performed the journey (300 miles) in about six days, the rate at which thirty or forty men would have impelled the same vessel. But then it must be observed that she was *empty*; for so little occasion was there for a vessel of this kind, that she had not a single thing on board, which so discomforted the poor old Dutchman, that he sold the boat and horses at a very great loss, and proceeded homewards in disgust through the wilderness. Thus did this fruitless speculation terminate in his ruin. It will be seen afterwards, that these people joined our party through the woods.

There is one thing which I must not overlook in my description of this river, and that is, the astonishing hurricanes to which you are exposed in descending it. These I have already given you some hint of; but to present an accurate picture of them, is far beyond the powers of description. I could not ascertain whether they always presented such awful appearances; but certain it is, that almost *every night*, about twelve o'clock, we were awakened by the report of the most tremendous thunder echoing from the surrounding woods, accompanied with the most vivid, dense flashes of lightning the imagination can conceive; at the same time the wind would blow with incredible fury, like a tornado; and all combined seemed to threaten our little bark with instant destruction. So

prodigious were its effects, that though we were sheltered by the trees and made fast to their trunks by two large ropes, yet were we obliged to *hold on* by the branches to prevent the wind from forcing us away from our mooring. At other times so great a swell would be raised in the river, that it would toss about our little boat like a ship in a gale of wind, overturn everything that was in it, and actually induce a sickness, such as is caused by the motion of the sea; and at the same time, by the violence of the waves, and the weakness of her frame, she would soon have been filled with water, had we not applied ourselves with all possible exertion, with buckets, cups, hats; and everything else we could find, to keep her *free* as fast as it came in. To give you some idea of the prodigious violence of the wind, I shall only inform you that the flexible branches of the *willow* were broken off in many places as easily as if they had been formed of the most brittle substance; at the same time that the tall pines and sturdy oaks fell a victim to its desolating fury. This scene we were witness to for *several* nights running, and nearly about the same time of night. The prodigiously loud reports of the thunder, and the dense streams of lightning, rendered it awfully grand. I wished several times to ascertain the course of these storms, or rather hurricanes; but we were always so much engaged in an attention to our own safety, that I could not spare time for the subject. They generally lasted about half an hour or three quarters of an hour; and then all would be calm again, and we would retire to rest once more.

Now I am on this subject, I must not forget to confirm the assertion which is made concerning the direction of the winds on this river and on the Ohio: they in general

set *up* the stream, and very much assist the *ascending* boats, who take advantage of this circumstance, by fixing sails; but these sails must be lofty, otherwise they will not feel the influence of the winds, owing to the surrounding trees on the shore.

It has been asserted by some that there is reason to suppose there exists in the upper country of the Missouri a volcano, from the pumice-stones which have been found floating on the Mississippi. I looked very narrowly after this article, but was never lucky enough to meet with any of it, though some men in the boat informed me that it had been seen; but they did not speak from their own knowledge of the subject.

There are no good fish in this river. What there are, are chiefly of the coarser kind, among which may be reckoned the catfish, which has sometimes been caught weighing a hundredweight; its head is formed just like a cat's, whence its name.

Before I leave the subject of the Mississippi, which I have now brought to a close, I must not forget to mention, that Dr. Waters, who resides at New Madrid, some few years since built a schooner at the head of the Ohio, and actually navigated it down that river and the Mississippi, and sent it round by sea to Philadelphia, where it is now employed in the commerce of the United States. This shows the practicability of building vessels on this river,* where everything fit for such a work is in so great abundance. If we may be allowed to anticipate a century or two, we may fancy we see a fleet of merchantmen doubling the Cape at the mouth of the Ohio, and bringing up that delightful river (where nothing is now heard but

* I find that this has been *repeatedly* done since my return.

the croaking of bull frogs, and the howling of wolves and wild beasts) the produce of every climate under the sun.

Having now detailed to you the particulars most worthy of notice connected with this river, I must recal your attention to the regular course of my travels ; but previous to this, perhaps it may be necessary to observe that I was on the immediate point of leaving New Orleans, in order to proceed to the United States by land.

I had not ceased to weary Mr. Clarke every day, by requesting to know what decision the governor had come to with respect to the papers I had sent in to him. He day after day put me off with some evasive answer ; and from all the information I could get respecting the improbability of obtaining redress, I determined not to tarry any longer here in the needless prosecution of a vexatious suit. Accordingly, our party being all assembled and ready, we agreed to take the early morning for our departure ; and on

Wednesday, June 21st,—we started. Our course lay across the Lake Ponchartrain, which is about six miles from the city. There is a little creek runs up from the lake to within a couple of miles of the city, and where the boats which navigate this lake harbour. To this place, then, we had to proceed, in order to get aboard the little boat which was to transport us and our horses across the lake. We had all appointed to meet at the gate of the city which leads to this place. I had waited upon the governor the preceding evening for my passport, which he gave me ; it was couched in the following words :—

“ NEUVA ORLEANS, 19th de Juino, de 1797.

“ Doy permiso a Francisco Bealy para que pase á Natchez por los lagos sin embarazo.

“ EL BARON de CARONDELET.”

By the time appointed we were all ready. We had each of us furnished himself with a proper dress for travelling the wilderness : it consisted of a pair of coarse brown overhauls, and a shirt of the same materials. This was all we had, excepting a pair of shoes, and all that we required in this hot climate. It felt very rough to me at first ; but as a *finer* dress would have been of no essential service, I was obliged to submit to necessity. We had each a pair of pistols, which we carried in holsters before us, and our horses behind carried our provision and clothes. Thus accoutred we formed a long cavalcade out of the city. The inhabitants who had been used to these expeditions scarcely noticed us, though we ourselves fancied that we should cut a curious figure in our procession. The sentinel having opened the gates to us, we made the best of our way to the creek, where the boat was waiting for us. The getting of our horses aboard (which at all times is a troublesome job) took us up some time, and it was near ten o'clock before we were all embarked. We hurried off as soon as we could, because we wanted to land on the other side of the lake before dark. We were obliged to row down the creek, which was very narrow ; and in our passage we met with nothing very remarkable save the multitude of alligators, with which this place swarms. The country through which this creek runs appeared to be one continued swamp, and covered with flags and bulrushes, the haunt of serpents and alligators. Some of the latter we came upon so suddenly (whilst they were basking in the sun, half immersed in water) as to be able to strike them with the oars ; on feeling which, they would flounce into the water, and spatter us with the spray.

The entrance of this creek from the lake is defended by a fort which appears very badly constructed, and mounted with five or six pieces of cannon : round about the fort there are a few plantations. Here we had to show our passports, and here it is that persons leaving the province are generally searched. However, luckily for me, that office was not performed upon us ; for having sent a person ashore with all our passports, we had the pleasure of seeing him soon return with permission to depart. It happened that fortune was not quite so kind to us in other respects ; for the wind, which on our first setting out was favourable, began now to blow from the opposite quarter, and detained us at the mouth of the creek, and immediately under the walls of the fort, till near three o'clock, when it once more shifted, and flattered us with the prospect of soon terminating our voyage. About that time, then, we started, and were soon hurried out to the middle of the lake, which is thirty miles wide. Here the wind began to lull again, and our little bark scarcely seemed to move. We were now out of sight of land, and nothing was to be seen around but a smooth expanse of clear water, reflecting from its curling surface the warm rays of an almost perpendicular sun. Oppressed with the heat, we retired to the cabin, (for there was one part of the boat covered in,) and there slept out the weary hours, which now appeared prolonged by the unpropitious gale. We resumed our station upon deck again about the setting sun, and at this time we had the prospect of distant land before us. Our place of destination was about three miles up the Chafunky, a small river on the opposite shore, where we were to land and pursue our journey through the woods. A breeze springing up about the

same time, we flattered ourselves that we should arrive within the mouth of the river before dark, when we might pursue our course up the stream in safety : whereas, if night overtook us before we made the river, we should be obliged to lay out at anchor till morning in the open lake, as the shore is a dangerous place to approach in the dark, the bank being so very soft and muddy, that if a boat were to stick fast therein she would not be able to force herself off again.

We were too confident in our expectations, for night began to throw her sable mantle over the hemisphere ere we could discover the least signs of the river ; and having approached within a proper distance of the shore, the pilot thought proper to drop his anchor, and leave us here to the mercy of the winds and waves. We then opened our wallets, and sitting round in a circle on the deck, we made a hasty repast, and then retired to rest. Our beds consisted of nothing more than a blanket spread upon the bare boards ; and, reclining on these in the open air, under the influence of a mild and clear atmosphere, we soon found ourselves locked in the silken bands of sleep, —lost to the world and all its care, and unconscious whether our pillow were formed of down, or framed by the pure hand of nature.

The wind, which when we retired to rest seemed somewhat appeased, now began to increase, and about the middle of the night raged with great violence, so that our little bark was greatly agitated, and by the confusion raging amongst the horses, was rendered very unsafe. It continued in this manner till morning, when daylight happily turned our enemy into a blessing, and the very object we had just deprecated wafted us to our destined

port in safety. Having arrived within the mouth of the river, we sent our boat ashore to collect some cane-stalks, and to cut some grass for our horses, who had refused to eat their corn, and had consequently gone without provender the whole voyage. You may possibly be surprised to hear of our sending ashore to cut grass; but you must understand that in this fertile country, the whole earth teems with this article, which grows to an astonishing height, so that a man may in a short time cut enough for his horses. About eight o'clock,—

Thursday, June 22nd,—we arrived at a small settlement on the banks of the river, and about three miles up it. Here we got our horses landed, and having refreshed ourselves with breakfast, (which was agreeably enriched with the addition of some milk we got at the plantation,) we proceeded on our journey through the woods. Whilst we were packing our horses, one of those belonging to Mr. Nolin broke away, and made his escape into the woods. Luckily, he had another with him which had been trained up to the practice of catching wild horses (mentioned to you in a former letter). This horse he immediately mounted, and having provided himself with a rope, he sallied after him, and in a few minutes came up with him, and throwing the noose round his neck, confirmed us in the account we had often heard of this method of catching these wild animals. This done, he soon joined us, and we pursued our journey together. We were seven in company. Our course through the woods lay about north-by-west. For the former part of this day we had a pretty good open path, and passed two or three plantations; but during the remainder of our journey we were not so fortunate, for the path now

began to fork into a number of different directions, and these again into a number of others, which would be crossed and recrossed by several more, so that it was *all chance* whether we pursued the right one or not. Our only guide was the *direction* it appeared to take : but in this we would often be deceived, owing to its irregular turnings and windings. These paths are made by the Indians when they go out to hunt, as they generally pursue one course till they get a little distance from their encampment, when they strike out diversely into the woods, so that it is not uncommon to find these paths have no determinative end, but are lost, in a manner, by the minuteness of their ramifications. Some of them, however, have a more determinate appearance, and are great leading paths from one village to another, or from one great path to another ; so that it will appear, that though these paths may be of service to the traveller, as affording him a beaten track when they fall in with the direction he is pursuing, yet they by no means point out to him the course he ought to take.

Our usual mode of travelling was to wake by daylight, so that we might be enabled to fetch our horses up and pack them, and get ready for starting by the time the sun had appeared above the horizon. Our horses would seldom or never stray from our place of encampment, but keep in a herd with each other ; and, if one of them were found straggling at any great distance from the rest, we could easily track him and fetch him back : however, we always took the precaution of putting *hobbles* on their feet. These hobbles are nothing more than leathern thongs, or iron chains, by which their forefeet were fastened together, and were a good preventative against

their straying, and if formed of iron, against the Indians stealing them. As to their food, they lived altogether upon the grass which they found in the woods, and which grows in great abundance; and we generally encamped upon a spot of ground where it abounded most, if water were to be found there. Our horses were chiefly those which had been caught wild in the woods; and so attached were they to this kind of food, that they preferred it, and thrived upon it much better than on corn. We used to continue on our route till about eleven o'clock, when we would choose a spot where there was water, (which in this warm climate we found rather scarce,) and there, unpacking our beasts and kindling a fire, we used to refresh ourselves and our horses for about three hours. Our horses we would leave to graze about the woods, whilst we ourselves (after finishing our meal) would recline under the shade of some trees, and there pass the hottest part of the day, free from the burning rage of the sun. But as soon as he began to lower his course in the heavens we would resume our way, and continue on our route till sunset, when we would make a second meal and then retire* to rest.

* As I had experienced a specimen of this mode of living in my expedition on the banks of the Miami, it did not appear so hard or unpleasant to me as it might otherwise have done. The mode of conducting our little society was also much the same. We took it by turns to kindle the fire, and supply it with fuel; and to fetch the water from the neighbouring stream. And as we rather suspected the honesty of the Indians amongst whom we were travelling, we appointed a watch to guard our horses and our persons during the night. Our bed was nothing more than a blanket spread out on the kind lap of nature; and our pillow either a log

After stopping to take our repast this day, I happened to be a little backward in repacking my horses, and not wishing to detain my companions, (for we had all agreed to wait for each other,) I desired them to proceed slowly, and I would overtake them. Accordingly they did; but the path forking out into two or three directions, I unfortunately took the wrong, and was some time before I found out my error. As I could not tell whereabouts it was that I had deviated from the right path, I found myself in an awkward situation. A stranger to this mode of travelling and the country I was in, I was at a loss what to do, whether to scour the woods, and perhaps involve myself in greater intricacies, or return by the same route to the place from whence I came, and wait for the next *caravan*. Shame forbade me doing the latter, and a wish to pursue my journey induced me to try the former; therefore, retracing my steps, I pursued every fork of the path till I could find some track of my companions; and in this unpromising task I happily succeeded after three or four trials, and, by a fortunate circumstance, came up with my party sooner than I otherwise should have done. About twelve miles from the lake there is a deep river, called the Tansypaho, which

of wood, or our wallet laid under our head. In this manner (after sitting round our fire till we had finished our homely repast) would we welcome that sweet destroyer of all human cares; and committing ourselves to the protection of an all-seeing Being, would bury all the toils and labours of the day in the silken bands of sleep. Our situation brought to my mind Virgil's description of a peasant:

"Ipse dies agitat fessos; fususque per herbam

Ignis ubi in medio, et socii cratera coronant;"

though we wanted the latter part of this picture to make our situations perfectly similar.

lies directly in the course from Natchez to Orleans. As this river is not fordable, we were obliged to unpack our horses and swim them across, and they were in the very act of executing this when I came up with them. I had *mude** the banks of this river twice before in my pursuit of them; and in one of my wanderings I stumbled upon an Indian plantation, where I saw a good deal of corn sowed, but no house. I traced every path which led to this river, hoping to come up with them before they crossed it; which, luckily, I did. There were two or three plantations on the opposite shore, lately formed by some new settlers. They kindly lent us a canoe, in which we transported ourselves and baggage; otherwise we must have made a raft and swam across with it. This place was fifteen miles from the mouth of the river, and is the last settlement to be met with till you arrive within thirty miles of Natchez: the distance between the two extremes being 115 miles. It was four o'clock when we arrived at this stream; and as we stopped at one of the plantations (which was possessed by a Mr. Cooper) to lay in some bread, cheese, &c. &c., it was nearly sundown ere we left his house. However, we proceeded three miles further that evening, when, having found a clear stream of water, we unpacked our horses, and encamped for the evening. The next morning,—

June 23rd, 1797,—we pursued our journey, and encamped about the middle of the day on the side of a hill, at the bottom of which ran a clear stream of water. In the evening, however, we were not quite so fortunate, as we were obliged to put up with some *stagnant water we found lying in a hollow made by a fallen tree*, and

* That is, *approached*.

which (from the dry weather preceding) must have lain there some time. However, it was very acceptable to us, as we had continued our course longer than we intended on account of our not meeting with any ; and we were at one time in doubt whether we should or not. We were aware of the excessive dryness of the country through which we had to travel, and had provided ourselves with canteens on that account. These canteens are tin vessels holding about two quarts, and are slung round the shoulders by a belt, like a soldier's cartouch-box. The excessive heat of the country prevents a person from carrying them, except when it is absolutely necessary ; and for the same reason they do not last long when once filled. It must be understood, that the country through which we are now travelling (West Florida) is of a dry, sandy soil, and situated in a very hot climate : consequently, whatever moisture falls on the ground does not long continue there ; and the little streams which flow in winter are dry long before the approach of summer. This apparent drought is compensated in a great measure by exceeding heavy dews which fall during the night, and which have come down so profusely, that in the morning (after lying exposed in the open air under a tree) I have found my blankets and clothes *complete'y wet through*. This, no doubt, relieved us a great deal from the pains arising from excessive thirst, which can only be conceived by those who have experienced them. When I at first observed this prodigious effect of the condensation of the vapours raised during the day, I supposed that we should all have been laid up by a violent fit of illness, on account of our exposure to it. But so perfectly does nature conform to herself, that we never suffered the least

inconvenience from it : in fact, my companions (who had been more accustomed to the woods than I) laughed at me when I mentioned my apprehensions ; and it is a notorious fact, that persons habituated to this mode of living will bear every change of weather, and every exposure to storms and climate, without experiencing any injurious effects : at once proving it to be the most healthy, and consequently the most natural, state of being.

Saturday, June 24th.—About eight o'clock in the morning we came to a small stream called Tickapoo, which is forty miles from Cooper's. The banks of this current for some distance are overgrown with shrubs and cane-trees, which rendered the passage rather difficult of access ; and it was so cut up with different winding paths, that it appeared like a maze, and we were obliged to hallo to each other in order to get together ; and owing to our taking different paths, it was some time ere we collected together again on the opposite shore. We actually did miss one of our companions, and giving him up for lost, proceeded on without him. However, he found us out a little after we had encamped that evening.

Sunday, June 25th.—About eight o'clock we came to the Aumete river. The banks of this river, like the one just mentioned, were almost impenetrable through the small wood growing thereon. Immediately on the borders of the river we observed an old encamping ground on each side ; consequently we supposed that this was the common crossing place. These encamping grounds are spots which you often meet with in the woods, and are known by the remains of fires, trees cut down, a well trodden surface, &c. ; but they are more particularly observed on the borders of rivers, because, as the Indians

generally fix upon the most shallow part of the stream for their crossing place, this part becomes more frequented ; and as they generally halt before they pass over, there comes (in course of time) to be a considerable clearance made.

On our approaching the river we found it was fordable for our horses, we therefore dispatched one of our companions each way to try if they could discover a shallow place in the river that we could pass without unpacking our horses. Unable to penetrate far on the banks, they soon returned without effect ; and as there was no other resource, we set about unpacking our horses, and, jumping into the water, carried our luggage across upon our shoulders.

From the opposite shore (which was by far the deepest, being over our heads) some kind hand had felled a large tree, which (remaining entangled in the banks) lay about three or four feet below the surface of the water. Wading up to our middles towards this tree, we mounted its trunk, and with a slow and trembling step reached the opposite shore in safety. This was repeated one by one several times, ere we had brought the whole of our baggage over, and consequently took us up some time. Then, driving our horses across, we tarried a little while and took some refreshment, whilst our cattle were brousing about among the bushes. When my companions found that they had to wade through the water, with all the *sang froid* in the world, they jumped in without offering to take off their clothes (which I have observed consisted only of a pair of overhauls and a coarse hunting shirt), and when they had finished their labour, suffered their wet clothes to remain and to get dry on their

backs. They told me it was more troublesome and unpleasant to shift and reshift their dress, than to follow the method they had pursued ; and as I always think that those habits and customs which long practice has pointed out are far preferable to any speculative opinions, I followed their advice, and would certainly recommend the same to persons travelling in this manner. It keeps the body cool in travelling ; and I have afterwards often wished for a shower of rain to repeat the experiment.

About six miles from the Aumete is the Commete river ; it is not so large a current as the former. It is said that they join below and form one stream.

Soon after leaving the Commete, we came to a place called the Hurricane. Here we saw the sad remains of a violent tornado, which ravaged this country some years back, and whose effects were observable over a vast extent of territory. It began in the Appaloosa country, in the southern part of Louisiana, and, crossing the Mississippi, proceeded as far as the Chactaw nation of Indians, sweeping everything before it like a torrent, and making a complete avenue through the woods nearly three hundred miles long, and seven in width : the pliant tender bramble, as well as the tall and sturdy oak, fell a victim to its desolating fury ; and they all lie now, involved in one common ruin, a monument of the prodigious effects of this phenomenon. It took us nearly the whole afternoon in passing this wreck of nature. The tall pines and enormous oaks opposed their bare trunks to our progress, and forced us to go a circuitous route to attain the opposite * *shore*.

* I say, *shore*, because the hurricane has produced a chasm in the woods like the bed of a river.

This circumstance delayed us so long that we could not proceed to the place where we had expected to encamp that night, and where we were in hopes of finding water ; for we had passed nearly the whole of the day without any. It began now to grow dark, and the scouts we had dispatched out into every valley we saw returned with the mournful tidings of their not being able to discover any water. Overcome with the oppressive heat of the sun, and our mouths parching with thirst, we determined to pursue our journey till we could obtain some. We continued on, till ourselves and our horses were completely subdued with fatigue, so that we were obliged to give up the pursuit, and with it the object of our wishes. We encamped on the side of a hill abounding with grass, and every profusion of nature, except the one we so much desired ; and, kindling a fire, laid ourselves down upon our blankets, and wished to have forgotten all our cares and wants in gentle sleep. But, alas! the wants of nature were superior to those of indulgence ; and we were prevented from taking any rest through the afflictive sufferance of excessive thirst. Unable to sleep, I rose about midnight, and directing my steps a little way from the camp, found the grass wet under my feet. I immediately recollected the kind substitute which nature has intended for these rainless countries, and found that the dew had by this time began to fall in considerable quantities. I soon communicated the happy discovery to my companions, who, by plucking up a quantity of the grass and drawing it through their mouths, agreeably satisfied their thirstiness, and slept in peace till morning.

This incident, which under any other circumstances we should have despised, afforded us great relief. However, if


we had waited a few hours longer, nature would have done for us what we had so long sought for in vain ; for when the morning light dawned upon us, we found our bodies wet to the skin by the profuseness of the dew which had fallen in the night ; so that by sunrise we were quite refreshed, and ready to pursue our course, which happily was near a termination ; for the same morning,—

Monday, June 26th,—about nine o'clock, we came to a settlement about a mile from the Hona Chito river. This is the most frontier settlement of the district of Natchez, and is about thirty miles from the town. We stopped here and gave our horses some corn, which they did not seem to relish so well as the wild food they had been used to ; we also got some milk for ourselves, and made our breakfast. Leaving this place, we proceeded down to the river. It is a pretty rapid stream, though not of any great size : the fording place is fifty miles from its mouth. We stopped here some little time and bathed, whilst our horses ranged about in the cane-brakes. We had by this time approached within the limits of the United States, which extend as far as the 31st degree of north latitude.

We slept this evening at the house of a Mr. Cooper, distant from Natchez about fifteen miles. This was the first regular plantation we came to, though we passed several others of inferior note. Here we got a good pasture for our horses, and a good supper for ourselves : that is, *good*, for the situation and state of society we were now in ; though we could not get any beds even here ; but after the table was removed, we spread our blankets on the floor in the same manner as we did in the woods. The next day,—

Tuesday, June 27th,—we arrived at Natchez, having been six days in performing a journey of 200 miles; not above forty miles of which may be said to be inhabited. As to the tract of land over which we travelled, it was for the most part a light, sandy soil, and overgrown throughout its whole extent with large tall pines; very little of any other kind of wood being seen here, except on the immediate banks of the rivers. These pines are of the species which is called by the inhabitants “pitch pine,” and grow to an *enormous height and vast size*: they are bare of branches to near their tops; so that in travelling through them they appear like a grove of large masts, which has a very curious effect. In several places near the lake we saw the signs of persons having been there to make pitch, tar, turpentine, &c., from these trees: these articles they take to New Orleans, and turn to a good account. Owing to the looseness of the soil, and the height of their trunks, these trees were often blown down by the wind, and they afforded us a most excellent fuel for our fires. We generally used to contrive to make our fires against the sides of one of their enormous trunks, and with the scattered limbs to raise such a conflagration, that we have been sometimes frightened at the works of our own hands. So exceedingly inflammable are these trees, that I have oftentimes laid a small fire at their roots when they have been standing in the ground, and in a few minutes this vast pile of wood has been enveloped in flames.

The surface of the ground is generally level till you approach within a few miles of Natchez, when it begins to assume a more hilly appearance. These are all the remarks on the face of the country which I am able to



make to you. In a tract of land where there is so great an uniformity, you must not expect a great detail of particulars. With respect to the possessors of it, whatever pretensions the Natchez or Alibamon tribe of Indians may have to it, I believe the Chactaw nation asserts its right to it; but of this I am not certain, as there are a number of tribes just expiring, and already extinct, in this quarter of America. I was happy to see Natchez again after so long an absence, as I had by this time become acquainted with several persons in it. Whilst stopping here this time, I put up at the house of a Mr. Routh, who lives about a quarter of a mile out of the town. Mr. Robb, of Pennsylvania, one of my travelling companions, put up at the same place. As this gentleman was proceeding to the United States through the wilderness as well as myself, we agreed to collect a party and start as soon as possible. Near thirty people soon joined us, and we appointed Seltzer's tavern, about twelve miles on the road leading to the wilderness, as our place of rendezvous, where we were all to meet on

Tuesday, 4th July.—As we had nothing to do here more than to rest our horses, and get ready for our tedious journey, we began to prepare every thing as expeditiously as possible. We found there was no beef to be got in the place; but our host obliged us by killing an ox on purpose for us, which he dried and prepared fit for packing. We stood in want also of biscuit, which we could not readily procure here. There was only one man who knew how to make it, and that was a baker in the fort, who was a Spaniard; to him we applied, and after a good deal of entreaty (for he was obliged to do it clandestinely) he made us a quarter of a hundredweight. Here we got

our horses fresh shod, and likewise had some iron hobbles made for them, to prevent their being stolen by the Indians. As we calculated upon a journey of twenty-one days, we laid in our provisions accordingly, which consisted of the following articles :—

15	lbs.	biscuit
6	„	flour
12	„	bacon
10	„	dried beef
3	„	rice
1½	„	coffee
4	„	sugar

You will wonder perhaps at seeing the two last articles ; but having experienced their beneficial effects in coming from New Orleans, we were determined to continue them through the whole of our journey. They not only afforded us nourishment, but invigorated our spirits, and also furnished us with a luxury which served to cheer us up in our tedious journey, and to reconcile us more to our *exiled* situation. We had also furnished ourselves with some Indian corn, which had been roasted, and afterwards ground to a powder. This is an excellent article in cases of extreme necessity, as a person may exist upon a spoonful of this a day, without experiencing any ill effects from hunger. It is what the Indians always furnish themselves with when they go out to war, being light in carriage, and efficacious in its effects. We took about a pint apiece of it,—more for the sake of a preventative against want, (in case we should be delayed on the road,) than any real service we intended to put it to. It will be seen, however, in the sequel, that we were reduced to the necessity of resorting to this expedient ere we arrived at the end of our journey. This being the anniversary

of the independence of the United States of America, it was intended to be kept as a festival by all the inhabitants who were hostile to the Spanish government. Mr. Ellicot and Lieutenant Pope gave a grand entertainment in the town, to which they were kind enough to invite me; but this being the day we had fixed for our departure, I could not attend them, though I should very much have wished to be present at their meeting.

Our place of rendezvous, I have already observed to you, was about twelve miles on the road: thither, then, we repaired about three o'clock this afternoon. We arrived there about an hour before sunset, and found several of our party had proceeded on to Grindstone Ford, about fifty miles farther on the road, and the last settlement on entering the wilderness; here they said they would wait for us till Saturday. Some of our party, however, had not yet reached us, so that we tarried till the afternoon of the next day,—

July 5th,—when we were joined by five or six others, and in the evening we proceeded on to Mr. Carradine's (about seven miles on the road), where we found good pasture for our horses, and accommodations for ourselves. It will be observed that the word "good" is a mere *relative* term, and must be taken merely as spoken in reference to our situation, and the conveniences and state of the country. I shall by and bye enter upon the *actual* state of society and manners of living, when I come to treat upon that subject generally. Next day,—

July 6th,—we went to Cole's Creek (eight miles) to dinner. We proceeded but slowly, in order that any other stragglers of our party behind might come up with us. After taking some refreshment at a plantation we saw on

the road, we proceeded on about ten miles farther, and, as there was no house near us, we pitched our encampment for that night in the open woods, by the side of a running stream; and next morning,—

July 7th,—pursued our course, and about sundown got to Grindstone Ford. This is the principal branch of the Bayou Pierre, and is situated about fifty or sixty miles from its mouth. The settlements about are not very numerous. There was formerly a mill built across the stream; but, owing to a curious circumstance, this has shared the fate of all other water-mills in the country: for it must be observed that there are a great many crayfish hereabouts, and these animals undermine all the dams which have ever been built, and soon make a vent for the water, which terminates in the total destruction of the dam. This place is situated about sixty miles from Natchez, and is the most northern frontier settlement in the district. From this place, then, we have to date our departure into the wilderness; and here we have to bid adieu to all marks of civilization till we arrive at the borders of the Cumberland river, in the state of Tennessee, a distance of about six hundred miles; and then we have to proceed through another wilderness of about three hundred miles; and after that, through a kind of half-civilized country, of about a thousand miles more, ere we should reach New York, the place of my destination;—making the whole distance from New York to New Orleans, by land, upwards of two thousand miles,—more than a thousand miles of which was through a totally uninhabited and wild country, and one-half of the remaining part not much better. Having now brought you to the verge of the district of Natchez, and about to

take my leave of it, perhaps for ever, I shall attempt to give you some description of the state of society, and the mode of living amongst the inhabitants.

In contemplating this part of America, we ought rather to anticipate what it will be, than to dwell upon what it actually is; for the country is so young (at least, has been kept back so much by the despotic government of the Spaniards), that it can scarcely be said to have formed itself into a characteristic body of people. If we look forwards, however, to a few years, when the mild government of the United States of America shall have meliorated the condition of the inhabitants, and given free encouragement to the progress of the arts of civilized life, and the diffusion of truth in whatever form she appears, we may flatter ourselves with the prospect of beholding this one of the first cities, both for commerce and the diffusion of general knowledge, in the western territory of America. As to its *present* state, owing to the disadvantages already mentioned, it is not very forward either in the luxuries or even the conveniences of life, many of the people in the country living in that state which characterizes the second classes of settlers in America. A log-house built upon their plantation, which is in general worked by negro slaves, together with a few cattle and articles of husbandry, forms their chief treasure, as well as the ultimate happiness of the country people; and farther than this their ideas do not seem to extend. Lately, however, some sensible people and men of education have come down to settle amongst them, allured by the prospect of the country being delivered up to the Americans. To show you the low state of accommodation, it will only be necessary to advert again to our journey both in and out of the district.

On either road we were obliged so to manage our daily journey, that we might arrive at a plantation in the evening where we were likely to get pasture for our horses: and even this was not always to be had. And when we did arrive there, a poor hut was our only shelter, and we were obliged to unpack our horses ourselves, and turn them into the pasture; and if we could get a mess of *mush* and milk, some fried bacon, or some fresh meat of any kind, it was as much as we expected, and for this we were charged enormously high. This ended, our bed was only changed from the soft carpet of nature for a hard floor, on which we would strew our blankets and lie till morning, when, fetching our horses up, and packing them, we would pursue our course. For my own part, I always preferred taking what we could get at these houses, and proceeding on into the woods, to sit down under the shade of some tree, on the banks of some brook, and eat it in cleanliness and comfort, rather than be surrounded with such a nest of filth and dirt. The very house at Grindstone Ford from which I now write this, and which consists but of one room, is filled with the bridles, saddles, and baggage of our party, as well as other lumber belonging to the family. In this, our supper (consisting merely of mush and milk) is to be cooked; and in this (after that was over) we are to take up our abode for the night. For my own part, rather than be poisoned with the effluvia of the living, I walked on the banks of the river till supper-time; and that over, I spread my blanket out on a grassplat in the garden, and there laid me down till morning; yet, even for this rough fare, they had the impudence to charge us a quarter of a dollar apiece.

Saturday, July 8th.—The first party which had pro-

ceeded on to this place, finding that we should make too large a body together, started yesterday on their journey through the wilderness without us ; and this morning *our* party, consisting of thirteen in number, started also. Our host put us across the creek which runs at the bottom of his garden, and which is not fordable ; and having all safely landed on the opposite side, we commenced our tedious journey. You must observe that the remarks which I made concerning the paths from New Orleans to Natchez, apply in the same manner to this part of our route ; and we had endeavoured (previous to starting) to collect what information we could respecting them. The very next day,—

Sunday, July 9th,—we began to experience one of those difficulties of which we met numbers ere we had finished our journey. A little dirty creek, which apparently one might almost jump across, opposed our progress. This creek, on sounding it, we found was not fordable ; we were therefore obliged to unload our horses and swim them across. As to ourselves, there was fortunately a large tree lying across the stream elevated near twenty feet above the surface of the water ; on this with tottering step we were obliged to carry our baggage, which we did after a deal of trouble and trepidation, whilst exalted on our narrow lofty bridge. After we had accomplished this, and got nearly ready for starting again, we observed a person making towards us on horseback, and soon recollected him to be one of the party which had just preceded us. He told us that, having encamped a few miles on, they missed one of their horses in the night, and were uncertain whether he had strayed from the rest, or been stolen by the Indians ; but suspecting the former, he had

come thus far to see if he could find him, conceiving that he might be stopped by the creek from proceeding farther. However, as we could give him no account of his beast, he soon left us, and hurried on to join his companions, who had agreed to wait his return. The next day,—

Monday, July 10th,—we came up with a party of about forty Indian warriors, who were just returned from battle on the other side of the Mississippi. As soon as they saw us they set up a rude hallo, and ran to meet us, holding in their hands the scalps they had taken from their enemies, and grinning with a degree of self-satisfaction at this mark of their prowess in the field of battle. Turning from this disgusting scene, we entered that part of their encampment where they were cooking their victuals, which consisted of the body of a deer which they had lately killed in the woods. They welcomed us in their rough manner, by shaking hands and offering us the pipe of peace; which we were obliged to accept, otherwise we should have affronted them. As we could not understand their language, we were unable to hold any conversation with them, though we clearly comprehended their meaning when they invited us to eat with them, &c. From them we understood also, that we were in the right path, which was a piece of information we were happy to hear. We soon left them, and proceeding on our course arrived on

Wednesday, July 12th, at what is called the Forks of the Path; for here one branch extends into the Chactaw nation, and the other (which we ought to pursue) into the Chickasaw nation. The path leading to the Chactaw nation was by far the most beaten, and is the one which we should have taken, had we not met some Indians just on the spot, who set us right. These Indians were Chac-

taws, and informed us by signs that there was a river about two miles off on their path; then putting his hand to his head in a reclining posture, and pointing to and pronouncing the word Chactaw, and holding up one finger, gave us to understand that it was one *sleep* (i.e. a day) to the Chactaw nation or village; or it was that distance which a person might pass over in a day, which with them is about twenty-five miles. In the same manner he informed us that it was five *sleeps* to the Chickasaw nation. We then by signs gave him to understand that we wished to be informed whether we might with safety pursue the path we were just going to take, or whether it might not lead us out of the way. He easily comprehended our meaning; and taking up a little stick which lay on the grass, and breaking it off at one end, began to draw on the ground the direction of the principal paths we should meet with, and pointed particularly at the one which we ought to pursue, at the same time uttering some strange sound which we could not understand. Our general course to this place seemed to be about east-north-east or north-east-by-north. The land, I observed, appeared to get gradually worse and worse as we proceeded from Natchez. Instead of that fine black mould immediately in the vicinity of the town, every day's journey exposed a more sandy and gravelly soil. For these last two days we passed through a deal of open woods and *prairie* (meadow) land; not that soft, fertile meadow land which properly goes by the name of *prairie*, but partaking more of the nature of what are more properly called *Barrens*, because the openess of the woods and the deficiency of timber arises more from a natural unfruitfulness than too great a luxuriance of soil.

Our journey thus far had been (generally speaking) through a level country; but on taking the Chickasaw path, the land assumed a different appearance: from a smooth open road, it became rough, broken, and bushy; and this in a constant progressive increase till we arrived at Nashville. However, the general nature of the soil of the country is not to be taken from the particular parts through which we travelled, as these paths are generally carried over the highest, and consequently the worst, ground, in order to prevent swamps and other impediments arising from a low situation. After leaving the Chactaw path, (which, I have already observed, was pretty well beaten,) we got upon one which we could scarcely trace, being in many places hardly discernible. As we were proceeding along upon it this afternoon, with our packhorses quietly following, making in the whole a long string of between thirty and forty horses, by some unfortunate accident, the girths belonging to one of them gave way, and the pack slipping round under the horse's belly, he was so frightened that he set off into the woods as fast as his legs could carry him, with the pack swinging and knocking against every tree, like a dog with a kettle to his tail. The other horses seeing this, set off also; and in a moment we were left in a deplorable situation. Bereft of all our provisions and clothes, and deprived of every means of continuing our journey, we had no other resource but riding after them, and endeavouring to run them down. Some of these horses were laden wholly with dollars, the proceeds of the cargo which some of our party had taken down the river. As there was no time for hesitation, we sallied after them with all the speed imaginable, not regarding bogs or trunks

ofr ees which were continually in our way. The foremost were out of sight presently ; some of the latter ones we caught soon, and delivered them to our companions whilst we went after the rest. And as they were quite out of sight, I was witness to a fact which I had often heard mentioned with admiration and wonder ; this was, the astonishing power which the Indians (and, in fact, all persons brought up in this mode of living) have of tracing the footsteps of any animal they are in pursuit of. In full speed did I see these men pursue the *traces* of the horses, and this over ground where it appeared to me impossible that the foot should leave any impression. Sometimes they would lose the track ; but in a moment, recollecting themselves, they would fall into it again, and pursue it with all the accuracy imaginable. In too many places we saw evident marks that we were right in our pursuit, for the track was scattered with girths, kettles, bags, and, in fact, everything with which the horse was loaded ; and though we might recover the beasts, we never expected to gather together all the different articles they had scattered about the woods. There were two others in company with myself ; as to the rest, they had taken different routes. After continuing in this manner for near an hour, we happily caught a glimpse of the object of our pursuit, and soon after could clearly discern four horses ahead, running at full speed through the woods. We immediately redoubled our pace, and fetching a circuit round a hill, came up with and hemmed in three of them, which we instantly secured. As to the other, he gave us the slip ; and as he belonged to one of those who were with us in the pursuit, and as there was no time to be lost, he set off after him, leaving us to take care of

those we had caught. Fortunately for me, one of these horses happened to be mine, and, what was still more fortunate, his pack was perfectly secure ; nor was there a single thing missing from his back. Having thus on our part formed an almost successful completion to our pursuit, we began to think about returning to our companions. But where were they to be found? We had been riding at full speed, in a wild and confused manner, through the woods, and had been wholly inattentive to our course ; and in what direction we ought to go in order to find them we knew not. In a few minutes we were scattered for miles through the woods, and possibly they might have proceeded on a course totally different from ours.

Our only resource was to return the same way by which we came ; that is, by retracing those steps which we had so speedily hurried over ; by this means too, we might be enabled to recover some of the scattered fragments which we saw lying on our way. My companion (there being only one with me now) was an excellent woodsman ; and I the more readily trusted myself to his guidance, well knowing that he would not easily mistake the track ; accordingly, having come to this resolution, we hastened our march to meet the remainder of our party. On our way we collected together a great many things which had been forced from the packs, and soon after sunset had the satisfaction to arrive at the very spot where the unfortunate accident commenced. But, not meeting any of our companions, we began to consider what had best be done ; when at a little distance we discovered the smoke of a fire, and on our near approach, the faces of our fellow-travellers. On inquiry, we found that three

of our party were still absent ; but as they were good woodsmen, we were under no apprehension about their missing us. We had scarcely unpacked our horses, and sat down to rest ourselves from the fatigues of the chase, ere two of our companions made their appearance, leading their horses loaded with the scattered fragments of their luggage, which they had picked up in the woods. Still, however, there was the one wanting who had separated from *us* ; and as it began to grow dark, we were fearful he would not be able to discover the track ; in order, therefore, to help him on his way, (if he were within hearing,) we discharged in volleys all the firearms we had with us, and made the woods ring again with the echo. This we continued at intervals, till, giving him up for that night, we lay ourselves down to rest ; and in the morning,—

Thursday, July 13th,—we sent out scouts into the woods, who, by shouting and making a noise, might be able to discover him ; for we did not wish to leave our companion in distress, nor to proceed till we had tried every mean to discover him. About nine o'clock, however, we had the pleasure to see him make his appearance, and with him the horse we had left him in pursuit of. He informed us that he lost sight of him again, and was obliged to give over the chase when the evening set in, as it was so dark he could not see the tracks ; getting off his horse therefore, and tying him to a tree, he lay down on the grass till the morning, when by daylight he renewed the pursuit, and soon after discovered him grazing in a valley not far from where he took up his night's lodging. We were very happy when we found that this accident, which might have been attended with

unpleasant and even serious consequences, terminated so favourably, that not a single horse or man was missing; though, as I observed to you before, we were scattered so widely in the woods. We still found, however, some of our luggage missing; but, as we had been so fortunate hitherto, we determined to try to recover this also; accordingly, one of our party who was an excellent woodsman, followed the tracks till he came up with it; and on our comparing our observations together, we found that there was but one article missing out of the whole baggage, and that was only a *tin cup*. We thought it not worth while to spend any more time in this neighbourhood; accordingly, about the middle of the day we formed ourselves into a line, and proceeded on our journey.

This same night, however, we had another unfortunate accident, which delayed us nearly the same time. This was no less than our camp being surprised in the night, and two of our horses stolen, by the Indians. Since our departure from Natchez we had never once taken the precaution to watch during the night. The Indians though they all appear very kind and civil to you when you meet with them on your way, and would not offer to molest you, or take anything from you, yet, if your back be turned but for a moment, or if they can come upon you unsuspected and unawares, think it no crime to steal *privately* whatever comes in their way. This was the case now. Some Indians had discovered us on our journey, (though unseen by us,) and had lain in wait for our evening's encampment. When we were all asleep, they led off two of our horses. We did not discover it till the morning, when, going to collect them all together in order to

start, we found two of them missing. We immediately dispatched a couple of our best woodsmen to scour the woods, and see if they could fall in with their tracks. They soon returned, and said that they had discovered the traces of the horses, accompanied with the footsteps of two Indians, and that their direction appeared to be towards the Chactaw nation. Immediately four of us armed ourselves, and set off in pursuit of these robbers, determined at all events to bring them back if we could discover them. We followed their tracks for near four hours, when, seeing no prospect of coming up with them, (as it was most probable that they had stolen them in the former part of the night, and had proceeded on as fast as we did,) we were obliged reluctantly to give up the pursuit, and return once more to our companions, comforting ourselves with that universal consolation, that "it was well it was no worse." These two horses belonged to one of those five Dutchmen in our party who, I before mentioned to you, undertook to work a boat against the stream of the Mississippi. We endeavoured to alleviate his loss by dividing his baggage amongst us to be carried, and by otherwise managing it so that he should not have to walk.

After two such unfortunate events, we were in hopes that the remainder of our journey would have been unruffled and undisturbed. Under this idea we stopped early this evening, and endeavoured to recruit our spirits and refresh our horses by a long rest. The sun was far above the horizon, when we encamped in a smooth plain almost clear of woods, and through which ran a pure, limpid stream, whose gentle current seemed to tempt us to stop and partake of its bounty. We saw the remains of an Indian encampment on its banks. There we stopped, and

unloading our horses, suffered them to range at large in the woods ; and, kindling a fire, dressed what homely provisions we had brought with us, and then lay ourselves down to rest ; and in the morning,—

Friday, July 14th,—we awoke perfectly refreshed, and ready to pursue our journey. Our path now lay over a very uneven tract of land, of a gravelly, barren soil, affording us very little good pasture for our horses, or water for ourselves. Several nights since we left Natchez have we been obliged to travel after dark, in search of this most necessary article ; and when we have met with any, it has been scarcely discoverable—lying in a little hollow, and overgrown with bushes and brambles, and perhaps the resort of thousands of living animals. This we could only conjecture from similar situations seen in the *day* ; for it was so dark that nothing of the kind was discoverable by us ; and so far would necessity triumph over the imagination, that we have thought ourselves extremely fortunate, and have uttered the most lively expressions of joy, at the discovery of a *nasty dirty puddle of water*.

I have already mentioned to you that we had five Dutchmen in our company. Ill fortune seemed to have attended these men throughout the whole of their journey. The object of their expedition (the navigation of a boat against the stream of the Mississippi) had failed, by which they had lost a considerable sum of money. Two of their horses had been stolen on their way home ; and now, to crown the whole, three of their party were taken ill on their journey. Two of them were not very well when they started ; but so great was their desire to return home, that they determined to accompany us at all events. They bore up through the former part of their

journey very well ; but this fresh misfortune coming upon them when they were so ill prepared to bear it, seemed to overcome them, and on

Sunday, July 16th, they declared their inability to proceed any farther with us. It was then about eleven o'clock ; we had stopped to rest ourselves and take some refreshment at an old encamping ground of the Indians. It was situated on the border of some waters whose taste was wholesome, but whose look was not very inviting. We were unwilling to leave them in this forlorn and destitute situation, surrounded on all sides by an Indian country, and cut off from all hope of aid and assistance ; but as it was useless for us to remain with them, (as we could afford them no help,) we were obliged to pursue our journey, as our provisions would not last us if we tarried here any time. We explained to them the motives of our conduct, and they allowed the justness of our observations. Two of their countrymen, they said, had agreed to stay with them ; and these would be sufficient to attend upon them. All that they requested of us was that we would send the first Indian who understood the use of herbs to them, that they might take some active measures for their recovery. This we promised to do, and as we were not above two days' journey from the Chickasaw village, we were in hopes we could soon comply with their request. There being a number of *poles* and a quantity of the bark of trees scattered about, (the remains of old encampments,) we fixed them a kind of tent before we departed, and made their lodging as comfortable as the nature of the place would allow : then having spared them what provisions we could, and left them a kettle to dress their victuals in, we

reluctantly bade them adieu, and left them resigned to their fate. We passed that afternoon through an almost impenetrable thicket, caused by a tremendous hurricane which happened in this country some time back. The brambles and bushes had grown up in such quantities between the trunks of the fallen trees, as to render it nearly impassable: but as it extended a considerable way, the Indians had trodden a path through it, by means of which, after some difficulty, we were enabled to arrive at the opposite side. The next day,—

Monday, July 17th,—we found two or three paths *join* in with the one we were pursuing, and to be apparently concentrating to one point, which plainly indicated to us our near approach to some village. We expected to have fallen in with some Indian habitation that evening; but we passed the whole day without having seen a living creature, and at night encamped as secretly as we could, keeping a pretty good look out after our horses. Next day,—

Tuesday, July 18th,—we observed the path bear more evident marks of being frequented, and in one or two places we noticed the fresh tracks of a horse, and of an Indian foot. Their direction was *towards* us, so that they must have passed us unnoticed in the woods. About ~~ten~~ o'clock we observed an Indian corn-field, round which some bushes and brambles were strewed, in order to keep off the wild animals. About eleven we were agreeably entertained at the sight of an Indian settlement: I say, "agreeably," because we were by this not ~~only~~ sure that we were in the right path, but, as the corn was ripe, we flattered ourselves that we should be enabled to get some, the taste of which would be very grate-

ful after so long an abstinence from all kinds of vegetables. On our approaching the hut, an old grey-headed Indian came out to meet us : he saluted us in a familiar style, by shaking our hands and uttering some incoherent sound. He then, pointing to the sun, and to his corn-field, gave us to understand that it was time for us to stop and refresh ourselves ; and as we longed very much for some of the old man's *roasting ears*,* we were not very backward in comprehending his meaning. We accordingly alighted near the old man's habitation, and unpacking our horses, turned them into the woods to graze. We had no sooner done this, than we were surrounded by the whole family, as well as by several other Indians, whom curiosity had brought to the spot. Some children were immediately dispatched into the field to fetch us some ears of corn, and which were laid over the fire before the house in order to roast. In the meantime, the Indians about us began to be very inquisitive and curious to know what we had brought with us ; at the same time they did not offer to molest us, or take any improper liberties with our luggage ; for, if they were inadvertently and undesignedly carried to too great lengths in any part of their conduct, the least check from us induced them to desist. This man's dwelling was situated upon an eminence, from which he could behold the surrounding country for a great way. His fields consisted of corn planted irregularly through a kind of *natural meadow* ; for they are too indolent to form a settlement where the country requires to be cleared. A clear spring broke out just under the hill, which watered the whole

* Ears of the Indian corn or maize, which are very good either roasted or boiled, and taste somewhat like peas.

valley, and rendered it very fertile. He had just planted corn enough to last him till winter; and when that time arrives, you would find him away from his home, and far in the woods in search of game, traversing the continent with his family from one extreme to the other. At the approach of spring he would return, perhaps, to his old dwelling, which (if not possessed by another) he would enter, and plant with another crop of corn. But if, on the other hand, one more fortunate had arrived there before him, instead of contesting the point of right with him, he would go to another place unoccupied: possession in this country being not only nine parts, but the *whole* of the law. After feasting very heartily upon these roasting ears which the little Indians had cooked for us, we went round to view all the particulars of this Indian settlement. It consisted of three principal huts, one of which might be said to be his winter habitation, and another his summer habitation, besides a kind of hovel where he kept skins, furs, gun, powder, tobacco, tomahawk, dancing bells, and a few implements of husbandry. His winter hut consisted of a few stakes irregularly placed in the ground, and plastered up on all sides with mud, so that there were only two openings—the one to enter, and the other at the top for the emission of the smoke. On looking into this, I observed two or three female Indians, who were employed about something or another, but the darkness of the place prevented me from precisely ascertaining what it was. In cold weather the family all assemble in this place, and shutting the door and kindling a fire in the middle, pass away days and nights in the midst of filth and dirt. His summer habitation is, in my opinion, a much more comfortable

one, and well adapted to the climate. It is built a few paces from the other, and consists of nothing more than four upright posts, on which is supported a kind of thatched roof, formed of the husks and leaves of the Indian corn. It is meant only as a protection from the heat of the sun by day, and a shelter from rain in the night. About three feet from the ground there are transverse poles proceeding from each post, on which is supported a layer of cane-stalks, which serves for a bed; and, according to the family, this bed is made larger or smaller, on which they *all* lie down. Their chairs are nothing more than the stumps of trees, and their drinking vessels the hollow of a *gourd*. Their days are spent, when not employed in the chase, in a state of constant indolence, basking in the sun from morning till night, thinking it beneath them to toil or labour, except in war or hunting. The care of their corn-fields is given to the women, who may be truly called the slaves of the men, performing all the laborious parts of life, and which in other countries are committed to the most menial servants. At the back of the dwelling we observed a little plantation of tobacco, which this family had cultivated for its own use, it being a favourite article with the Indians. Seeing us so inquisitive, the old man showed us all the things appertaining to war. He brought out the *war bells*, which are formed of a hollow nut, about as big as one's fist, in which was a stone, which made a hollow dismal sound. Two or three of these he put on each wrist, and as many on his feet, and immediately set up the war dance, going instinctively to the fire and dancing round it. Whilst the old man was amusing us in this way, some of the other Indians had got to our baggage

and stole several things from it, and amongst the rest a pocket-book, powder-horn, and a tin cup. We immediately discovered the one who had taken the two latter; but the fellow who stole the powder-horn we could never find out, though we pretended to be angry with the old man that he did not exert his authority in order that it might be restored. Seeing what people we had to deal with, we determined to set a watch over our luggage to prevent further depredations. We now began to think of our fellow-travellers whom we had left behind, and endeavoured to make ourselves understood, but the old man could not comprehend our meaning when we attempted to describe their situation. At that instant, however, we observed the approach of a white man, and flattered ourselves that in him we should be able to find an interpreter. This man was one of those of whom there are a great number, who, from habit and disposition, prefer the Indian mode of life to that of a more civilized state; and, from living on the frontiers, and making occasional incursions into their country, had come at last to settle amongst them, and be adopted as one of their children. Some of this class of men are to be found in all Indian countries; and it is remarkable that though this circumstance is well known and very common, yet you seldom hear of an Indian renouncing his mode of living or his country, and imposing upon himself the bonds and shackles of civilized society. We found in this man a welcome visitor, for he not only informed us of several particulars relative to the country, but on our relating to him the state of the Dutchmen whom we had left behind, he told us that this old Indian passed for a kind of doctor amongst his tribe. We then

informed him of the request they had made on our leaving them, and which he instantly communicated to the Indian, who promised to go, *but not without the assurance of being paid for his trouble*. I could not but remark, on this particular, how wrongly we had been informed of the Indian character. I began to think, with Rochefoucault, that all marks of hospitality and friendship amongst nations and kindreds, were shown more for the sake of having the same returned, than through the love of virtue itself; and that when a *stranger* offered himself for a share of it, where we could not expect to be repaid, he would probably meet with a repulse, whether it were in the midst of civilized and refined society, or amongst the savage nations of North America. Possibly, an intimate connexion with the white people had taught them the use of money, of which, however, they seemed to have but a slight idea, for any piece of silver (whether a dollar or a *pistareen**) was of the same value to them.

Whilst we were talking to our interpreter, I remarked the old man very busy in endeavouring to make himself understood by some of our companions, whom he had taken aside to communicate some proposals to them. I observed that he very much amused them, by the frequent peals of laughter which they continually sent forth. On my approach to them, I easily comprehended the old man's meaning, and could not but smile at his mode of expressing himself, though at the same time I was somewhat shocked at the proposal. This incident I may have an opportunity of communicating to you in person, perhaps, one of these days; I shall therefore pass it over for the present, and proceed to inform you that we did

* About a quarter of a dollar.

not leave this place till we saw the old man start on his journey to our fellow-travellers whom we had left behind. He put some dried venison in his blanket, and slinging it across his shoulders, without any other preparation, set off to find them. As to ourselves, we began to think of starting also. Our interpreter informed us that it was thirty miles to the big town, or village of the Chickasaw Indians we were to pass; and that there was another white man, who lived about nine miles off, who had a hut and a plantation, and lived near the place where he himself resided. As this was on our way, he agreed to accompany us thither, which was an acceptable offer, as the path now began to be very intricate. He was accordingly our guide; and as we had tarried at this place so long, we determined to make the plantation the extent of our day's journey. We arrived there before sundown, and, kindling a fire, and fixing our encampment about a quarter of a mile from the plantation, walked down afterwards to see the possessor of it, Mr. Mackintosh. We found him to be much such another character as the one I have just described. He had early imbibed the habits of the Indians, and, wandering into the country, had set himself down here. The Indians had given him as much land as he wanted, and he cultivated part of it in a loose and slovenly manner, though much better than the Indians themselves. He had got several negroes under him, whom he employed on his plantation. This I thought remarkable, as I should have supposed that the Indians would have guaranteed a state of independence to all persons within their territories; but I understood that they never interfered in the internal regulation of domestic affairs: for those who arrived *slaves*, so they must remain

till their masters chose to give them their liberty. On the contrary, if any negroes arrived *free*, (of whom there were many,) the Indians would support them in their freedom, and not suffer them to be enslaved. I have already observed to you, that on my journey down the Mississippi, I heard that the Chickasaws were on the eve of a war with the Creek nation of Indians: this had lately broken out in actual hostilities. Three Creeks had proceeded within a short distance of the town which we were approaching, and had killed some of the inhabitants, and immediately hastened homewards; but a party of Chickasaws instantly arming themselves, pursued and killed every one ere they reached their own country. This adventure took place a few weeks before our arrival here, and we found them all preparing for war. Mr. Mackintosh was fortifying his plantation with a regular stockade, raised about twelve feet high, and formed of thick planks. This surrounded the house at a convenient distance, so as to allow free room for the besieged within; and was constructed upon nearly the same plan as those places which are called "stations" in the United States. We entered his habitation, which was a poor sorry place, little better than an Indian hut: though even in this he was looked upon as a *little king* by the natives, and appeared to have every thing which such a country affords in the greatest abundance about him; though he told me that the Indians (who are a lazy, indolent race, in respect to husbandry) were such incessant beggars, that he was not only prevented from bettering his situation, but oftentimes reduced to great straits himself. We asked him if he could supply us with any provisions, as we feared we had not enough to last us into the settlements.

He led us to an outhouse where there hung a quantity of dried beef and venison, and also some cheeses of his own making; but as these last were a miserable article, we declined accepting them. We desired him to put us up some beef, and to get some Indian bread made for us against the morning, which he promised to do. He told us we should find the road difficult to find till we got beyond the big town, and that we had better have a guide with us. Upon his recommendation we got one, (a white man in the neighbourhood,) and promised him six dollars to conduct us a few miles beyond the town. It coming on to rain, we returned to our camp after visiting the huts of the negroes, who appeared very much pleased to see so many white people amongst them. As the rain continued to increase, we were obliged to remove our encampment higher up the hill, in order that the water might the more readily run off, and leave us a dry place to sleep upon. In the morning,—

Wednesday, July 19th,—packing our horses, and calling upon Mr. Mackintosh for our bread and beef, (for which we paid him two dollars,) we put ourselves under the direction of our guide, and proceeded on our journey. One of our companions wishing to exchange a horse, as he was afraid his own would not be able to take him home, we went a few miles out of our way to call at the habitation of a man who had got some to dispose of. We arrived there about the middle of the day, and found the plantation possessed by a half-Indian; that is, one whose mother was an Indian, but whose father was a white man. He was a tall, athletic man, and was appointed a kind of commander-in-chief, or *leader*, as the natives call it, over the forces to be raised against the

Creeks. There were several other Indian chiefs with him, who came out to meet us at the gate of the plantation, and who welcomed us there, and invited us to alight and take some refreshment. I could not but smile at their offer, as the utmost they could give us was some Indian bread and milk, together with a little venison; however, as even this was acceptable now, we did not refuse their offer; but, entering the yard, and unpacking our horses, made ourselves as one of their party and kindred. In the middle of their hovel we observed a long stool, on which stood a large iron kettle full of milk: of this we were invited to partake; therefore, taking our spoons out of our packs, we all sat round, and soon finished it. Picture to yourself a dirty hole of a place, without any other light but what came in at the door, plastered up on each side with mud, with a rough-hewn stool, formed with the tomahawk out of the trunk of a tree, an iron kettle which had served for all the purposes of life, together with all our spoons dipping into it alternately;—imagine us sitting round this kettle, in this filthy hut, and in this manner devouring the homely repast which was set before us, and such an one as we had not experienced since our departure from Natchez;—imagine all this, I say, and a thousand other things which at the time tended to heighten the effect, and you will then be enabled to form some idea of our situation.

Whilst I was here, one of the Indians, who had got a couple of sorry horses with him, called me aside, and endeavoured to persuade me that my horses would not be able to carry me home, as the country was very rough, and the fatigues of the journey destroyed a great many of them; and that I should do well to exchange them for

some fresh ones; adding at the same time, that he had two *excellent* ones that were used to the country, and therefore desirable on that account. I pretended to believe all he said; but at the same time evaded his proposition; however, he grew so importunate, that I was at last obliged to give him a flat denial, at which he seemed somewhat angry, and then accosted another of my companions in the same way; but he, seeing the manœuvres he had been practising, repulsed him in the same manner, and soon after the fellow took his departure.

Not being able to meet with any horses here, we made the best of our way to the town, and we arrived within five miles of it that night. We did not care to enter it that evening, but preferred encamping on the skirts of it, in order that we might avoid being observed, and that the next day we might be enabled to proceed a good distance on the other side, as the Indians are not very desirable neighbours, on account of their pilfering disposition. On our way thither we met with several Indians, all of whom accosted us, and behaved with the greatest politeness to us. You may be perhaps surprised to hear of politeness in the wilds of America. To be sure it is not such as you meet with in a court or ballroom; but it is dictated by a much better spirit. *There* it is a cloak to hatred, malice, envy, and every evil propensity; *here*, it is the effect of a hospitable* and benign disposition: it is

* Mr. Baily was at this time an instance of his own remark as to the tendency of desert life to give the white man an Indian propensity. He seems to have quite forgotten that his polite friends were on the watch to see what they could steal, and that they would have left him in the wilds without a horse or a kettle, if their luck had favoured them.—ED.

the effusion of a beneficent mind, breaking out in acts of kindness.

On our way also we observed the remains of several Indian plantations, which appeared to have been cultivated for a few years, and then left a prey to time and nature. The few peach and apple trees which the owner had planted were overrun with weeds, and left to be enjoyed by the first possessor. As some of these were now ripe, we halted in several places to gather them, claiming in this respect the rights and privileges of an Indian.

Our encampment this evening was formed as secretly and as retired as possible, as we were fearful the Indians might have notice of our arrival, and come and steal our horses. With this intent we retired about half a mile off the path, and sat us down in a valley watered by a fine clear stream, and abounding with *pea-vine*, a most grateful vegetable for the horses. This pea-vine grows naturally all over the continent of America, and affords excellent nourishment to the cattle, when it abounds in great quantities (as was the case here) : it fills the whole place to the height of four or five feet, entwining itself round every substance it comes near. As our horses, in such a pasture as this, did not require to roam about much, we tied them up to a tree near the place where we slept ; for, as we had no fire this night, (lest we might be discovered by the Indians,) we were all scattered about at unequal distances throughout the valley, yet near enough to join in case of an attack. We had agreed, that whoever waked in the night should go round and see that all the horses were safe ; and in order to guard against any mistake of their persons, we appointed a watchword ; so that if we saw one walking about in the night we knew

how to challenge him. After all the precautions, we laid us down and retired to rest ; and in the morning,—

Thursday, July 20th,—we awoke agreeably refreshed and happy to find everything in perfect safety. We started early, in order that we might be enabled to make a long journey to-day. In about an hour we got to the town. Our approach to it was from an eminence, and as its situation is in a large open prairie lying in a valley, the uncouth huts of the Indians, contrasted with the fertile corn-fields, presented a beautiful view. It was not a regular, compact town, as I expected to find it, but consisted of *sets of houses* (four or five in a set) scattered at unequal distances over the whole valley. Between these clusters of habitations the space was occupied by corn-fields, which were fenced round with a rough kind of inclosure, formed partly of posts, and partly of light poles running from one post to another. Some of the houses, I observed, had gardens, which were fenced round much in the same manner as their fields, and in which they planted a few fruit-trees and some vegetables, such as pumpkins, squashes, &c.

I could not ascertain whether it was a whole family that lived in each *set of houses*, or whether it was a promiscuous and adventitious connexion ; but certain it is, that in winter time *one* habitation contains the *whole* ; for their ordinary huts are only intended for *summer* residences. They have a large house in common, which they call the *hot-house*, where they reside in winter. In this house there is no window, nor any other opening but the door and the chimney ; and in this several families will shut themselves up during the winter, and never stir out but to enjoy the pleasures of the chase. There is also

connected with these *sets of houses*, a place which they call the *fort*, which consists of a few stockades irregularly placed in the ground, and within which they retreat when they are closely attacked : this, to be sure, is a mere apology for a fort, as a common field-piece would rattle the whole, at one fire, about their ears.

On our first entering the village we stumbled upon a party of Indians who were amusing themselves with some athletic exercise : we rode up to them, and they very cordially shook hands with us (a sure mark of friendship). We asked them if they had got any mockasons, or other articles which we might purchase of them, but they replied in the negative. Leaving these, we proceeded on to the heart of the town, where the houses were more frequent as well as close together ; and here we stopped at the hut of an Indian, and alighted from our horses, in expectation of being able to get some of the articles we wanted, which we intended to have carried home as presents to our friends. But we were as unsuccessful here as in the other place ; and whilst some of our companions were busy in negotiating some business with one of the Indians, the rest wandered out into the garden, and filled their pockets with fruit. The Indians observed them, but only smiled, and made signs as much as to say we were welcome. By this time we had got half the village about us, and some of them began to be very inquisitive to know what we had got in our packs. On handling one of those which contained *dollars*, they smiled and uttered some exclamation, as much as to say that they knew what was there.

They then began to examine our firearms, (which were all loaded,) and to admire the beauty of the workmanship. We suffered them to do as they pleased, as we well knew

that resistance on our part would avail nothing against so many. We trusted ourselves entirely to them, well knowing that as we were at peace with them, they would not molest us,—at least not *openly*; and at one time I observed that *every* firearm we had was in their hands, so that, had they been so disposed, they might have done with us what they chose. They then examined our clothes, and particularly our hats, which they wanted us to exchange for theirs, crying out, “Swop!” “Swop!” a word which they had borrowed from the Kentuckians; however, as the disposition was not mutual, we declined their offer.

Leaving these, we made the best of our way out of the town; and in going along it so happened that I was the hindmost. We had scarcely got to the edge of the village when two Indians accosted me, and stopped to shake me by the hand, as I had observed they did the preceding ones. I returned the compliment, and (they continuing to remain where they were) I did not immediately proceed; however, I found soon after that I had fallen into the company of a couple of troublesome visitors. They handled my packs with a great deal of inquisitiveness, and then approaching my horse’s head, took out my pistols, and examined them also. I wanted to have proceeded on, but they did not seem inclined to let me; and one of them, holding out his hand to my head, seemed to ask for my hat. I gave it him; he admired it, and wanted to “swop,” as he called it. I shook my head, and he was going to return it; but the *other* (snatching it from his hands) ran off with it as fast as his legs could carry him. I immediately jumped from my horse and followed him; but not being able to come up with him, I

threatened to hurl my *tomahawk* at him if he did not give it up. The other Indian, seeing this, halloed to him, and he dropped the hat and ran off. I did not think proper to pursue him, though I was very angry at the trouble he had given me ; and on my return to the other Indian he only laughed at me, and seemed to think that the other had done no more than what he had a right to do. During this transaction the rest of our party were far advanced out of sight ; so that I was left *alone* to contest the point ; and what rendered my situation more distressing was, that during the chase both my horses (finding themselves without a master) took the liberty of running away also. This was truly an unfortunate circumstance, as I knew not *which* path either they or our party had taken. However, following one where there appeared to be the most tracks, I ran with all speed, and soon found myself on the banks of a little creek. Here I set up a loud hallo, which possibly might reach the ears of my companions : fortunately it did, for I heard it immediately returned "in well-known accents." Wading through the creek, which was up to my middle, I hastened to the place from whence the sound proceeded ; and then I intended to have got their assistance in helping me to find my horses ; but I was agreeably surprised, on approaching them, to find that my horses had taken the same path with them, and were now quietly walking in the cavalcade. They congratulated me on my good fortune, and assured me that they did not miss me from their party, till they saw my horses come galloping after them without a rider ; that they then stopped, expecting me soon to follow.

Soon after this, our guide, having put us on the right path, and given us a few directions how to find our way,

took his leave of us. He told us that there was a creek about twenty miles from the town, which we might be able to reach that night, and that we should *cross it*; because if any Indians pursued us in order to steal our horses, they would hardly proceed *beyond* this creek. We intended to have followed his advice; but on our arrival at the creek, the sun had been set some time, and as we saw no convenient place to cross it, (it not being fordable,) we were necessitated to tarry on *this* side all night. However, in order to deceive the Indians, we took a circuitous and mazy route through the woods for near an hour, and at last encamped not a quarter of a mile from the banks of the creek. We kindled no fire this night for fear of discovery; but each of us, taking his repast, lay himself down wherever he chose, and in the morning,—

Friday, July 21st,—we prepared for crossing the creek. On exploring the banks a little, we found a place where a tree had been cut down, and lay across the stream; this we observed had been used as a bridge for foot passengers, but the banks did not allow the approach of horses, so that we were obliged to seek out another place for *them*. This accomplished, we carried our luggage, one by one, over this narrow bridge, and then returning to drive our horses over, happily overcame this difficulty. It was now forty miles to the Tennessee river; the country towards which was of a hilly, gravelly nature, so that our progress now was not so quick as it had been. There was another thing also which tended to impede it. There is in this country a plant which grows wild in the woods, and which goes by the name of the *poison vine*. I have thought since that this plant is the *rhys vernix* of

Linnaeus, as it possesses all the properties which Kalm mentions of that plant ; though he says that it is a *tree* growing to the height of twenty feet, with a strong woody stalk ; whereas, I have never seen any but what grew somewhat like the *vine*, whence its name. However, as their *properties* are the same, I shall briefly relate what the Professor says upon this subject :—

“An incision (says he) being made into the tree, a whitish yellow juice, which has a nauseous smell, comes out between the bark and the wood. This tree is not known for its *good* qualities, but greatly so for the effect of its poison ; which, though it is noxious to *some* people, yet does not in the least affect *others* ; and, therefore, *one* person can handle the tree as he pleases, cut it, peel off its bark, rub it (or the wood) upon his hands, smell at it, spread the juice upon his skin, and make more experiments without inconvenience to himself. *Another* person, on the contrary, dares not meddle with the tree whilst its wood is fresh ; nor can he venture to touch a hand which has handled it, nor even to expose himself to the smoke of a fire which is made with this wood, without soon feeling its bad effects ; for the face, the hands, and frequently the whole body, swell excessively, and are affected with a very acute pain. Sometimes bladders or blisters arise in great plenty, and make the sick person look as if he were infected by a leprosy. In some persons, the external thin skin, or cuticle, peels off in a few days, as is the case when a person has scalded or burnt any part of his body. Nay, the nature of some persons will not even allow them to approach *the place where the tree grows*, or to expose themselves to the wind when it carries the effluvia or exhalations of this tree with it,

without letting them feel the inconveniences of the swelling which I have just now described. Their eyes are shut up for one or two or more days together by the swelling. I knew two brothers, one of whom could, without danger, handle this tree in what manner he pleased, whereas the other could not come near it without swelling. A person does not know that he has touched this poisonous plant, or that he has been near it, before his face and hands show it by their swelling. I have known old people, who were more afraid of this tree than of a viper ; and I was acquainted with a person, who merely by the noxious exhalations of it was swelled to such a degree that he was as stiff as a log of wood, and could only be turned about in sheets : though I have never heard that this tree has been mortal."

Thus far Professor Kalm : and I believe that I can add my testimony among the rest to the truth of what he has asserted ; for I not only experienced its ill effects *myself*, but have seen *others* escape unhurt, though exposed to the same danger. Mr. Ellicot, the American Commissioner at the Natchez, informed me that one day on the Ohio he sent the men ashore to cut down some wood for firing ; they accordingly brought some aboard. This was in the evening. In the morning, he, together with several others, found their eyes almost swollen out of their heads, at the same time other parts of their body underwent a considerable tumefaction ; and though the *rest* of the company were exposed to the same vapour, or effluvia, from the wood, they experienced no ill effects whatever. On examination, they found that they had ignorantly cut down some of this tree for the purposes of firewood. This gentleman is so remarkably susceptible

of the poisonous effects of this plant, that when he was at Natchez he seldom walked out, as he was always affected by a near approach to it ; it constantly causing his legs and feet to swell considerably, and also affecting him in other parts of the body. If he *did* walk out, it was always with the precaution of taking a bottle of some liquid which the physician of the place had prescribed, and with which he anointed the parts affected. This liquid I believe was the common Goulard of the shops. With respect to ourselves, as we were continually exposed to its effects in going through the woods, (and particularly when we alighted, and had to walk about afoot,) it was hardly to be supposed that we should escape *if* we were susceptible of its poisonous qualities. As to *myself*, it had such an effect upon my legs as to cause them to swell to a very considerable size, and to break out in open ulcers; not only rendering the parts very painful, but incapacitating me from wearing boots, which I had latterly put on as a preventative against its ill effects. I was even obliged to cut open my overhauls, and bind up my legs with a handkerchief; and as my feet were also so swelled that I could not get on my shoes, I was forced to make a pair of mockasons out of the upper leather of my boots. In this situation was I obliged very often to dismount from my horse, and walk over very steep hills, or rather mountains, covered with a species of small jagged stone, which penetrated my feet to the very quick, and rendered my journey almost insupportable. When I was in the Indian town I asked our guide if he knew anything that would cure it; and he pointed out some herbs to me which he recommended me to boil and lay as a poultice on the part affected. This I did every night, and found my leg

very much relieved by it. One or two of my companions were affected in nearly the same manner, which obstructed our expedition over this hilly country to which we are now arrived. As to the *rest*, they experienced *nothing of the kind*; and though they handled the plant, and were equally exposed to it with ourselves, they never felt any ill effects whatever.

Owing to this circumstance, then, the rapidity of our progress over this hilly part of the country was not very great; because, as I before mentioned to you, we were often obliged to dismount and walk up some of these steep eminences; so that it was

Sunday, July 23rd, ere we arrived at the Tennessee river. We had descended from the hilly country into the *bottom* (which always borders these large rivers) over night, but it was near ten o'clock this morning when we first arrived on its banks. The shores were everywhere covered with thick cane brakes; but as we struck upon the general crossing-place of the Indians, there was a large clearance made immediately on the bank of the river, where we unpacked our horses, and began to consult upon the best mode of crossing it. This river, I have already observed to you, rises in the lower parts of Virginia, and after flowing through a fine fertile country for near a thousand miles, empties itself into the Ohio, about fifty-seven miles above its junction with the Mississippi. At the place where we had to cross it, it was above a quarter of a mile wide, and flowed with so rapid a stream, that it was with difficulty that a person (breast high) could stand against it; at the same time it appeared to glide along in silent dignity, with its surface smooth and unruffled, and its body dark and clear, at once proclaiming the depth and importance of the current.

Our first consideration was, how we were to overcome this tremendous obstacle. We had no canoe nor other vessel with us, neither was there time for making one, as it would have taken up two or three days, and perhaps we could not have accomplished it at last. We observed in several places about here the similar attempts of other persons for this purpose, but they had all been left unfinished. Our only resource was, to make a raft for our baggage, and to drive our horses over as we had been used to do before. Even *this* was a laborious undertaking, as we had to cut down all the wood for this purpose, and there were only two tomahawks in the whole party, by which we were to fell the trees and cut their trunks up into proper lengths for the rafts. However, as there was no other means left of arriving at the opposite shore, we determined upon this as the least evil of the two. Having come to this resolution, we suffered our horses to wander among the cane brakes in search of pasture, and then kindled a fire and dressed some provisions for our breakfast. This ended, we all set to, in order to accomplish our design, and immediately many noble trees fell a victim to our expedition. We cut their trunks up into pieces of about six or eight feet long, and binding several of them together with the stalks of the vine, (of which there is a vast quantity all over the woods,) formed the foundation of three separate rafts, for we found that neither *one* nor *two* would be able to contain all our baggage. This accomplished, we placed on the top a layer of bark, or a quantity of dry sticks, on which we fixed our packs in order that they might not get wet, and tying ropes to each of these rafts, we had to swim with them across this rapid current like so many horses

drawing a cart! A tremendous undertaking! and which I review now with a degree of horror and affright! Besides, as the forming of our rafts and the placing of our packs thereon was wholly accomplished *in* the river, (where we were obliged to work almost naked from morning till near sunset without relaxation,) it so enervated us, that we were in but improper condition to swim across with them that evening. However, Mr. Robb and three of his messmates (who had made two rafts between them) determined upon taking theirs over that evening. As to my own part, as our raft was the largest of the three, I preferred delaying till the morning; and it was fortunate I did.

Just at this place there is a sandbar on each side of the river, which extends a considerable way into the stream. This is a great advantage and help to persons crossing it, because, if they can swim to the opposite sandbar, and touch the ground with their feet, it not only saves so much trouble, but prevents their being carried any farther down by the force of the current. But then, if they are carried *beyond*, and miss this sandbar, the banks on each side are nearly *perpendicular*, so that three feet from the shore it is beyond a person's depth; and, to make it still worse, (in case of such an unfortunate event,) the river makes a short turn just below; so that a person in the middle of the stream would in such a case find it difficult (if not impossible) to reach *either* shore. We were apprised of this circumstance, and endeavoured to take all the advantages, and at the same time avoid all the dangers, of it. Mr. Robb and his three assistants *harnessed* themselves on to *one* of these rafts, and dragging it as far up the stream as they conveniently could, in order

that they might have all the advantages of the drifting current, started about sundown to cross this rapid torrent. We beheld them with a deal of anxious suspense from the shore, and narrowly watched every movement. We saw them presently *assume the deep*, and trust themselves to their exertions and labour for a happy issue to their undertaking. The stream now began to hurry them along, and ere they had approached the middle, they passed the point where we stood to behold them. They were then in the most rapid part of the current, and were obliged to redouble their strokes to gain the opposite shore. We soon lost sight of *them*, being hid behind the prominent raft. But we had soon the satisfaction of seeing their bodies emerge from the water, plainly indicating to us that their feet had gained the opposite bar; and not long after we could just observe them in the act of unloading their *propitious* raft.

We were happy to see so fortunate a termination to our first essay, and we flattered ourselves that our next would not be less so. Mr. Robb having another raft to take over, he hastened back with two of his associates as soon as he could, leaving the other *there* to take care of the things. As soon therefore as they had landed all their goods, they plunged into the water, and as they were without any incumbrance in returning, they soon arrived on our side of the river, bringing with them the ropes they had used to tow the raft with. As it was now pretty late and almost dark, we determined not to take any more over this night, but wait for a new day ere we attempted our second essay: accordingly, having fastened our rafts in a secure place where the drifting logs could not hurt them, we spread our blankets, and after refresh-

ing ourselves with some provisions which we had cooked by a large fire we had kindled in the hollow of a tree, we laid us down to rest completely overcome with fatigue ; and in the morning,—

Monday, July 24th,—renewed our labour. As we had toiled very hard yesterday, and had been in the water for so many hours together, we found ourselves very much fatigued and enervated this morning ; but as no time was to be lost, we hastened to get everything ready for our departure. As we had a difficult enterprise before us, and as we were so reduced in strength, we thought proper to take our breakfast first, and then to prepare for starting. This over, we went to the waterside, and there, stripping ourselves, made the ropes fast to the raft, and endeavoured to pull it up against the stream *as high as we could*. We found this a difficult undertaking, as the current was so rapid, and we set our *wits* to work to find out some means of alleviating it ; and at last we contrived to tie the rope to a couple of our horses' *tails*, and make them haul it up. We did so : but the animals had been so little used to this employment, that they did not take it very kindly, but soon began to be restive, and to endanger our little raft. However, trying two others, we succeeded better, and hauled our raft near half a mile up the stream. This done, we made her fast, and returned to drive our horses across the river ere we started ourselves. In this we did not find much difficulty after they once took the stream ; for they all followed the foremost, who, finding no prospect of return, (for he attempted it several times,) made the best of his way to the opposite shore. We then went back to seek our raft ; Mr. Robb at the same time starting with *his*. We endeavoured to follow

his steps, and accordingly two of my companions fastened the ropes round their bodies and swam in *front*, towing the raft after them. I was *behind*, serving the office of a *rudder*, as well as forcing the raft forwards by the action of swimming. We *stemmed the tide* as far as possible; and when we could no longer oppose the stream, we committed ourselves to the deep, and endeavoured by mere dint of labour to gain the opposite shore. As this was our first essay, we were not aware of the extreme difficulty of crossing so rapid a current; as to Mr. Robb, he appeared to go on and to gain ground with all the ease imaginable: whether it was that they were better swimmers than we, or had been more used to the practice of *rafting*, I know not; but certain it was, that ere we had reached the middle of the stream we began to be so extremely faint and tired, that we were obliged to desist for awhile from proceeding any farther; and during this *respite* the stream was carrying us down at an astonishing rate. Seeing then that no time was to be lost, we *set to* again, and exerted ourselves to the utmost in order to gain the middle of the stream, to which we had not yet arrived. We did manage to get there, and by this time had the mortification of seeing that Robb had nearly landed his raft; but we were so enervated by having been in the water all yesterday, and so little used to this mode of travelling, that we were obliged to rest again, being absolutely incapable of going any farther. However, as by a second delay we stood a chance of being carried beyond the opposite sandbar, I used all the arguments I could to encourage them to proceed. They attended to what I said, but tried without effect; for after advancing a few strokes, they declared they were so overcome as to

be unable* to proceed. We were now carried *below* the sandbar, and in a truly unfortunate situation we were ; for if we did not make the opposite shore before we arrived at the *point* below, we stood a chance of being drifted by the current the *whole length of the river*. Under these circumstances we made another essay, but all without effect ; for the stream was now become so strong, that we were soon hurried down *below the point of land*, and all hope of attaining either shore entirely cut off. Imagine now to yourself a river upwards of twelve hundred miles long, with scarcely a single habitation on its banks the whole way, or these so widely scattered as to be incapable of rendering any assistance to one floating on the wide bosom of its waters ; its banks also *for the most part*† *overflowed*, so that if our raft should strike against the shore, *we should be unable ever to reach the land*:—imagine us, I say, with this prospect before us, without any hope of ever reaching our companions, our heads just above water, our hands clinging to the raft and supporting our weary bodies, our provisions before our eyes, but ourselves unable to touch them, as the least disturbance given to our raft would instantly overwhelm it ; so that we were in danger of perishing by want *in the midst of plenty* ; the trees and banks *flying* beyond us, and ourselves carried along with an astonishing

* You must observe that myself and one of my companions had our legs very much swollen and ulcerated from the poison of the plant which I have already described to you : this was (no doubt) rendered worse by our long continuance in the water yesterday : so that altogether it was no wonder we did not succeed in our attempt.

† The land was overflowed on each side for near twenty miles, except in those places where a *bluff* appeared.

rapidity, and hastening to a river abounding with alligators and other ravenous animals, unable to defend ourselves:—imagine this, and a thousand other things still more horrid, which fancy at the moment created, and you will have a tolerable idea of our situation at this time. What was to be done? Nothing. We were resigned to our fate, be it good or bad; and even in this forlorn situation could not help being merry, and passing our jokes upon each other. So true is it, that in the midst of *health*, death did not strike us with the same terror as when accompanied with a lingering illness.

We were now nearly wafted out of the sight of our companions, who stood on the shore commiserating our situation, but unable to render us any assistance. One of those who were with us jocosely halloed out to them, that we were under sailing orders, and could not *stop* to speak to them, as a breeze had just sprung up: I told him I hoped the gale would be prosperous; and it brought to my mind two lines in Virgil:—

“Quo Deus, et quo dura vocat fortuna, sequamur.”

“Quicquid erit, superanda omnis fortuna ferendo est.”

By this time we had been carried four or five miles down the stream, when one of my companions, casting his eyes around, observed something near a point of land below, which he took for some men on the water. As we could not imagine what should bring any human being into this quarter of the country, except Indians, whom we did not expect to see now, as they were in a state of war, and consequently kept themselves very secret, we thought he must be deceived. However, a few minutes convinced us to the contrary, and clearly discovered two men of a dark countenance in a canoe close to the shore, work-

ing against the stream. This, you will say, was a joyful sight to us; but we did not regard it as such at first: for as it is natural to mankind to suggest the *worst*, particularly in any unpleasant situation, so we immediately fancied that these people were Creek Indians, a nation almost continually at war with the Americans, who, if they discovered us, would actually murder us. Under this idea, we were in doubt whether we should *hail* them or not, for we were now got pretty near to them, and they could not distinguish our heads from the raft, which appeared to a person situated near the shore, like a bundle of logs, or the top of a tree, floating down. I used all the arguments I could to induce my fellow-travellers to hail them, and told them, that thereby they might exchange what appeared to me a prospect of *certain* death, for a possibility, at least, of escape; and that if they let this chance pass by, they not only would not deserve, but most probably would not meet with, another to save them from the danger that awaited them; but fear worked upon them so far, that they said they *knew* they were Creeks, and were determined to continue on as they were going. However, as I looked upon it almost as an interposition of Providence for our safety, I halloed to them as long and as loud as I could, when they came opposite to us. They looked about for a long while, and could not imagine from whence the sound proceeded; but on my repeating it, and waving my hand, I observed them to push from the shore and make towards us. Even this did not appease my companions: for when the Indians took up their *paddles* to row towards us, they said they had taken up their *guns*, and were going to fire upon us; and one of them said he actually *saw him pull the trigger!!!*

so astonishingly does imagination work upon a perturbed mind. They were not long in approaching us, and we soon found that they were no enemies; for, smiling at our situation, they came alongside and took us into the canoe. We then took our baggage and the cord from the raft, and assisted the Indians in paddling up to the place from whence we set out, letting our unfortunate raft drift down the current—the sport of the wind and the waves.

Thinking ourselves now completely safe from our perilous situation, we began to congratulate each other upon our happy escape; and as we looked upon these Indians, who were Cherokees, as our deliverers, we made them partake of our bounty, at least of such things as we had to spare, and which to them were of more value than gold or silver: such as salt, gunpowder, biscuit, beef, and even money. This they not only deserved, but seemed to expect from us. We were not long ere we arrived at the spot where our companions were anxiously commiserating our condition, ignorant of our happy escape. They were not a little pleased, then, when they saw us return. They had not got any of the things upon the *bank*, but merely landed them upon the *beach*: for you are to understand that, excepting time of high water, the banks of all the rivers are elevated at a *considerable* distance above the surface of the water. The place where we landed was about twenty feet high, and nearly perpendicular. Up these banks, then, we had to haul our baggage; that is, we had to carry every single article, one by one, up a bank, which was so slippery, that we could scarcely support ourselves. However, as all labour seemed now light to us, we set about it with a good will,

and before the middle of the day got every thing on the *upper* bank, and ready for starting. Our Indians assisted us in this expedition ; and after it was accomplished we sat down and took some refreshment together. During this time our two deliverers entered into conversation ; that is, they endeavoured to make themselves understood, for they could not talk English ; but from their manner of expressing themselves, and their action, we learnt that they had been on this river some time, and had gone at intervals to hunt on the shore ; that they happened to be at the spot where the party who had preceded us struck the river, and that they ferried them across ; that they took us for Creek Indians at first, and were unwilling to come to us, thinking we had adopted that mode of drawing them to us, and then shooting them ; and finally, that it was but three *sleeps* to Nashville. In this, however, they were either mistaken, or they did not understand our question ; and it will be seen that it led us into great difficulties.

Having refreshed ourselves, we began to think of collecting our horses together, which we had not seen since yesterday. Accordingly we took our routes through the woods, and in the course of an hour we assembled them all together,—none of them having strayed more than a quarter of a mile from the spot ; but it being a close, thick wood, and full of cane-brakes, we could not readily find them. We soon packed them, and taking leave of our deliverers, pursued our course through the woods. We endeavoured to take the *high lands* that night, but were unsuccessful ; we were therefore obliged to encamp in this *bottom*, which, though it afforded excellent pasture for our horses, yet poured forth such quantities of mos-

quitos, that we had scarcely any sleep ; therefore, starting *early* in the morning,—

Tuesday, July 25th,—we pursued our course to the high lands. We were happy in having understood that it was no more than three sleeps to Nashville, as not only would there be a speedy termination to our laborious journey, but also, as we had but one more day's provision, we hoped to reach some of the frontier settlements to-morrow evening. As we were proceeding this morning up the hilly country, which now began to wear a formidable appearance, (being that range of mountains which separate the Tennessee and Cumberland river,) we suddenly met a party of Indians on a narrow path. As we were ignorant of what nation they might be, we began to be rather alarmed ; but on a nearer approach we observed that the foremost of the party was a white man, and by his addressing us in English we discovered them to be friends. We immediately asked him how far it was to the settlements, and he told us “two hundred miles!!” At this we were quite astonished, and really alarmed, as all our provision was exhausted, and we expected to have seen some settlement to-morrow. We desired him to recollect if he were right, and repeated what the Indians at the river had told us. He said he had just come over the ground, therefore must know ; and that the Indians had misunderstood our question, it being three sleeps to *Duck* river, which we should reach to-morrow or next day, and not to *Cumberland* river, on which the town of Nashville stands. He added also, that the Creek Indians infested the path we were going ; and that we should be careful how we proceeded, and keep a good look out all the way till we were got through

their country. We thanked him for his advice, and, as we thought we had best hurry on, took our leave and departed.

About eleven o'clock, our usual time of halting, we stopped in order to refresh our horses; but, alas! as to ourselves, we could scarcely muster up a meal amongst us all: we found now that our *burnt corn* would afford us an excellent substitute in this unfortunate dilemma; accordingly, (making a last meal of what little provisions we had,) we had recourse to this last expedient for our support. It was true there was plenty of game in the woods; but we had only one gun in company, and the *stock* of that happened unfortunately to be burnt one night, so that only the *barrel* remained. We tried several times to kill some *deer* with our *pistols*, but without success. In this predicament we hurried on as fast as we could, and endeavoured to reach the nearest settlement as soon as possible.

In proceeding on, we now always kept one of our party about a quarter of a mile ahead of the rest, in order to keep a look out, as the white man had desired us; and this office we undertook by turns. At night when we came to encamp, we always chose a spot where we should not leave the least traces of our footsteps, and (deviating from the path) every one *singly* formed a circuit of near a mile, and arrived at a certain spot agreed upon before we separated, where we formed our encampment; and there, without lighting any fire, or speaking above our breath, we would lie down completely overcome with fatigue, and without having any other refreshment but a spoonful of this burnt corn mixed up with a little water. With all these precautions, however, to avoid


discovery, we could not escape the penetrating eye of the Indians. The circumstance which leads to my mentioning this is not only curious in itself, but also will serve as another instance of the remarkable capability which those people have of discovering the tracks of any human being. Just before we reached the Chickasaw town, two Indians had started off, bound to the same place that we were. We had never seen anything of them till this night, when, after we were all retired to rest, we discovered some strange faces walking about our encampment. We at first thought it might be some of our companions going their rounds, (for we all slept at a distance from each other,) but on their not answering the watchword we gave the alarm, and we all instantly assembled together. We were not under any apprehensions that it was an *open* enemy ; for if it were, they would have fired upon us ere they had discovered themselves. Finding that they did not attempt to get off, but rather advanced towards us, we brought them in the midst, and as one of them spoke a little broken English, *he* was the orator. He told us whence he came, and whither he was going, and that as *his* nation was at war with the *Creeks*, they had secreted themselves as much as possible during their journey, which was the reason we had not met with them before. On asking him how he came to find us out, he said that he discovered the tracks of many horses in the path, and that about sundown he lost sight of them : not knowing whose tracks they might be, he said they were determined to ascertain it ; and, accordingly, retracing their steps, found out the spot where one of the horses had deviated from the path and struck out into the woods : (though we had taken all precaution to prevent such a

discovery :) this track they had followed till it led them to the present spot, where they discovered several horses roaming about, and on a nearer approach, the faces of several persons; but that not being able to ascertain whether we were Indians or white people, (it being dark,) they had come still closer; and on finding us to be the latter, had taken the liberty of coming in the midst of us and making themselves known. We could not but admire the simplicity of his story, and their wonderful sagacity, *that after all the pains we had taken they should be still able to find us out.* We made them welcome among us, though unable to offer them anything for their comfort, our provisions being all gone. After spending a little time in other conversation, they spread their blankets at a little distance from us, and then we all retired to rest together. We would have employed these men to hunt for us, to endeavour to procure us some venison, but they had no guns with them, being going on an *express*, and furnished only with their blankets, and a few strings
- of *junk*, which is a kind of dried venison cut into slices, and put on a string, which they hang round their necks. On this, and *this only*, will they travel for hundreds and hundreds of miles through the woods, and partaking of no other liquor but the clear streams they meet with on their way. In the morning,—

Wednesday, July 26th,—we resumed our journey. The Indians were up and ready to start before us; they took their leave of us, as they intended to go through the *heart of the wood*; and we soon after directed our steps toward the path we had left last night, and continued our route, placing one of our party ahead of the rest. About eleven o'clock we stopped as usual to refresh our horses,

and for ourselves to partake of a spoonful of dried corn ; a sorry pittance, but such as we could not remedy ! We therefore determined to make ourselves as happy and as comfortable as we could. We knew that this would support life a long while ; and after it was gone we must draw lots for one of our horses. This we had agreed upon ; if Providence should not interpose before that time : it appeared hard to be starving in the midst of plenty, with the deer and turkeys scattered every where before our eyes, yet unable to get at them, though we used all our endeavours every time we halted, but without effect. It was now since Monday night that we had tasted nothing but this scanty allowance of ground corn. The succeeding day we began to feel the ill effects of hunger ; but the next day this was alleviated, and many of our companions began to feel the approach of fever. I don't know that ours could be called any great time of abstinence : but then it must be understood that all persons travelling in the woods are endowed with a most astonishing *appetite* ; and as all things ought to be taken *relatively*, or (at any rate) to be judged of by their effects, I think you may allow this time to be *double* in its consequence to what it would be under any other circumstances.

With heavy hearts, and sad, we packed our horses and resumed our journey. We were quite out of spirits at the dark picture which was before us ; and though we endeavoured to cheer each other as well as we could, yet the demands of nature and our pressing wants were superior to every other consideration. As we were proceeding along in this melancholy mood, about four or five o'clock, we were startled all on a sudden by the bark of a dog,



whose *voice* we could distinctly hear before us, echoing through the woods. On advancing, we found that our foremost man had halted ; and on our coming up to him, found that he had stumbled upon a party of Indians. We were in doubt what to do, whether to advance towards them, or avoid them by taking a circuitous route. The latter would not do, as the dog had already discovered us ; we therefore thought it better to approach as friends, and trust ourselves to fortune, at the same time keeping an eye to our own preservation, and their number. We advanced, and soon saw a party of men and women sitting round a large fire, which they had kindled in the midst ; at the same time we saw the smoke ascending through the trees, and (what was more pleasant and agreeable than all) we plainly distinguished the smell of venison roasting at the fire. Elated with joy we hurried on, regardless of the Indians, who were now risen to meet us. They advanced and shook hands with us, and accosted us with the title of "good brother ;" this was an agreeable introduction to us, and paved the way for farther kindness. We soon discovered that they were a party of Cherokee Indians who had come here to hunt, in which they had had good success, and the carcasses of several deer lay on the ground about them. This was a most agreeable sight to us, and we soon gave them to understand that we had gone without victuals since Monday. They appeared to commiserate our situation ; and spreading some skins for us to sit upon, laid their venison before us, of which we partook most bountifully. They had also got with them some honey which they had taken the other day from a hive they found in a tree. This honey was tied up in a fresh deer's skin, and was

carried about with them to eat with their venison. They immediately untied their bag and set it before us ; and we used it as a kind of sweet sauce, dipping our venison into it, and making it a substitute for bread. We all *set to*, with most ravenous appetites after so long fasting, and devoured an astonishing quantity of their provision ; no meal was ever so grateful as this : the Indians sat in silence, and seemed to take a pleasure in being able to gratify us. A limpid stream ran close by, which furnished us with water, and in which the Indians had a canoe, which was loaded with deer-skins, the fruits of their industry : they pointed to it, and told us they were going down to New Orleans with it, to exchange for guns, powder, blankets, &c. &c. I could not but admire their simple mode of living, and thought I never saw the Indian character to so much advantage as in this little family. They appeared to me perfectly happy in this their primitive state of man, and to enjoy all the pleasures which so simple a state, unsophisticated by the false refinements of life, seemed to afford. Possibly the gratitude which I felt for their kindness might add a colour to the picture which I formed of their real condition.

Having made a very hearty meal of this *homely** fare, we asked them if we might take some with us for the remainder of our journey, as there was plenty lying about ; they said we might take what we wanted, and immediately spread it all before us. We asked, "How far to Nashville?" They said, "Three sleeps." Accordingly we took provisions enough to last us three days ; and having given them some salt, powder, and a few small pieces of silver in return, we

* It sounds somewhat singular to call venison homely fare ; but such is the fact.

took our leave of them and departed. It was now near sundown. However, as we wished to get *as far from them* this night as possible, we continued on a few miles, and then encamped ; for these Indians, who had been so remarkably kind to us just now, would (if they could surprise us in the night) think it no crime to steal our horses, or anything else they could get at *without our knowledge*. Our encampment was formed with the same precaution as that of the preceding night, and we remained unmolested. In the morning,—

Thursday, July 27th,—we rejoined the path, and pursued our journey. About ten o'clock we found our way obstructed by an exceeding steep precipice, and the path to take a sudden turn to the right. On approaching the edge of this chasm, we observed in the bottom below, immediately under us, the waters of Duck river, rolling its dark stream in silent majesty through this deep canal. We followed the path, which carried us along the edge of this precipice, and found that it soon brought us by a gentle declivity to the borders of the river. The stream appeared so dark from the reflection of its steep banks, that it seemed to us not to be fordable ; yet as the path was brought down here, it was the most probable place to find a ford. Accordingly one of our party agreed to go first and reconnoitre the stream ; and after several attempts he found a part where the horses could cross by swimming only a few steps. This done, we formed our packs in such a manner that they should not get wet, and then followed our guide through the stream, and got safe across without any accident. On the opposite shore we found it difficult to rejoin the path which led to our destined port, as there were so many crossing and recrossing each other ;

at last we fixed upon one which appeared to lead the right course, and accordingly pursued it.

After crossing Duck river we considered ourselves as out of the reach of the Creek Indians, as they seldom come on *this* side : we therefore congratulated ourselves in having so well escaped discovery in our journey through that part of the country which they have always infested. This brought on (when we stopped at night) a relation of several escapes and adventures which some of our companions had met with in their journey through different parts of the woods. Our encampment was formed this night on the bank of a creek, surrounded by fine lofty trees, and abounding with excellent food for our horses. Whilst we were discoursing in this manner round a fire we had kindled for the night, we observed the same two Indians approaching us who had surprised us so unexpectedly a few evenings past. They joined us and shook hands, and as the evening was far advanced we invited them to tarry with us all night ; they agreed, and lighting their pipe, handed it round to us all, and made us understand that they were in perfect peace and harmony with us. They then retired to a little distance, and kindling a fire by themselves, spent the night apart from us. This was done in order that they might not incommode or molest us, or take up any of our room round the fire. Having it now in our power to treat them a little better than we did the last time we saw them, we offered them some venison, for which they seemed very thankful. We then filled their pipe with some of our tobacco : *this* won their hearts, and perhaps prevented our horses from being stolen. When they retired to rest they came to us and shook us all by the hand, and then went

and lay down. We soon after did the same, and in the morning,—

Friday, July 28th,—resumed our course, the Indian having started before us. Our course now was over a very mountainous and hilly country ; and as we were often obliged to get off our horses and walk, it did not accord well with my legs, which were not yet perfectly healed : particularly as the soil consisted of a light, sharp gravel, which penetrated through the soles of the rough covering which I had made for my feet out of the tops of a pair of boots. Some of these hills were so remarkably steep that we have been obliged to clamber up them, and their descent has been so sudden and perpendicular that we have left our horses to take care of themselves, and come down how they could ; and turning our faces to the hill have descended backwards, like going down a ladder : afraid to venture resolutely forward, lest we should fall from the top to the bottom.

When we parted with the Indians on the 26th, they told us it was three sleeps to the settlements. Supposing them to be fully informed on the subject, we did not doubt what they said, and therefore laid in no more provisions than were necessary to take us there ; but, whether we were blessed with more than common appetites after our long abstinence, or were deceived with respect to the quantity of provisions we purchased of them, certain it is, that at the end of the second day after we left them, we found that we had not more than one more left ; accordingly, the next day,—

Saturday, July 29th,—we thought it best for every one to hurry on as fast as he could, and endeavour to reach the settlement ; and that those who arrived there first,

should send out a person with provisions to meet the rest. There was another inducement for us to adopt this measure : some of our horses after coming so long a journey were almost knocked up, and rendered unable to proceed. At least, their motion was so slow, that it retarded those who might otherwise have reached the settlement long ago. Having, therefore, come to this resolution, we did not long continue together, but those who had the best horses soon advanced before the rest. As there were seven of us in company, we agreed that Mr. Robb and two others (whose horses were pretty fresh) should go on first. Mr. Bledsow and myself formed the next division ; and Reuben and Smith (whose horses were completely fatigued) brought up the rear.

Each of the other parties had a kettle apiece, in which they could cook what little provisions they had remaining, or wherein they might form it into a kind of broth or soup, as a mean of making it go farther ; but as to us, we had but one small vessel between us, and that was a quart tin cup. In this we boiled a little coffee when we stopped in the middle of the day ; and this (added to a little bacon and some bread) was all our fare, for we saved the remainder for our morrow's dinner. We did not perceive our lonely situation at this time, as we had been used to detach ourselves in parties, and take our meals separately in the middle of the day ; but as night drew on, we wished the more to rejoin our company. We continued our course this evening as long as we could : our path lay over two ridges of very high hills, which we crossed after dark. We wished, if possible, to have overtaken the first party this evening ; but after travelling till near ten o'clock we were obliged to desist ; and accord-

ingly, having retreated into the woods about half a mile from the path, we lay ourselves down *in a dry ditch*, without making any fire, fearful lest we might be discovered by any Indians near the place. I never was so fatigued as with this day's journey. We had travelled from sunrise till near three hours after sunset, with very little food, and over a rough country: so that when we came to lay down we were so overcome with fatigue as to be indifferent whether we reposed in safety or not. Wearied out with the labour and toil of the journey, we discarded all ideas of danger, anxious alone to refresh our weary limbs in the soft embraces of *care-subduing* sleep. As an instance of this, I shall only mention a circumstance which took place this night. After we had retired to rest some time, and stretched our tired bodies on the blanket we had spread on the hard ground, anxiously invoking the god of sleep, we heard (as we had often done before) the howling of wolves, bears, and other wild animals around us; and several times the noise of their feet among the dry leaves on the ground, prowling about in search of prey, and fast approaching near the spot where we lay; yet so little anxious were we to defend ourselves from these lords of the desert, that though our pistols and tomahawk lay but a few yards from us, we were so completely overcome with the fatigues of our journey, as to be unable to rise from our beds, and endeavour to prepare ourselves for the attack. In a few moments after sleep would overtake us, and we remained insensible of our dangerous situation till the morning. This fact is strongly impressed on my memory; and I read* it now (1809) with sentiments of horror.

* This is a note added many years after the account was drawn up.—ED.

Sunday, July 30th.—About daylight we awoke, and kindling a fire, boiled a little coffee, which very much relieved us, and enabled us with the greater cheerfulness to pursue our journey. The third day was now expired after seeing the Indians who told us it was three sleeps to the settlements ; we, therefore, were in anxious expectation every moment of descrying some traces of civilization ; and pushed forwards our horses with great eagerness under this impression. But, alas ! we had the mortification of seeing the sun attain his meridian station (pointing out to us it was time to halt) without having discovered the least mark whereby we were enabled to judge how far we might be distant from any habitation. We stopped, and kindling a fire for the second time, consumed our last meal ! It consisted of a little coffee, and a small piece of bread and bacon : a poor allowance ; but such *another* one would have been very acceptable in our situation. This done, we reclined ourselves under the shade of some lofty tree, and tarrying here about three hours in order that our horses might have time to feed, endeavoured to comfort each other under the calamitous circumstances with which we seemed to be possessed. After this we pursued our journey ; and about an hour after sunset came to Harpath river. Having crossed this, we journeyed on very leisurely through the woods by ourselves till it was too late to discover the path. Just as we had determined in our minds to stop, and had come to a stream of water situated in a valley, (where we could mix some of the ground Indian corn we had remaining,) whom should we see just before us but two Indians who had for some time discovered *us*, and were now halting in order that we might overtake them. We advanced, as it

was in vain to endeavour to escape; and when we came up with them, we recognised them to be the same couple who had surprised us twice before in the same manner. These men had started *afoot* from the Chickasaw village and kept the same pace with us all the way, though we were on horseback: an astonishing instance of their perseverance and activity. As we were now become old companions we did not scruple to travel with them, nor to invite them to halt at the same spot with us. As it was now late they did not hesitate to accept our invitation; accordingly, we unladed our horses and kindled a fire upon the spot: and here, I could not help commiserating our second unfortunate situation in which they had beheld us; as for themselves, they could not assist us. Accustomed to live very sparingly when they travel, they had furnished themselves with scarcely more than was necessary for the preservation of life, so that it was in vain that we looked to *them* for any assistance; and they, on their part, were equally disappointed on our side: so that after sitting by our fire a little while, and endeavouring to pass off a dull hour as cheerfully as possible, we laid ourselves down without any other meal than a little water mixed with some ground corn. In the morning,—

Monday, July 31st,—we started early, and leaving our Indians behind, advanced as speedily as possible on our way. About nine o'clock we observed the path begin to widen, and assume the marks of being much frequented; and soon after we observed evident tracks of cows and other animals, which plainly indicated to us that a settlement was near at hand: and about eleven o'clock, to our great happiness and comfort, we descried the first civilized habitation since our leaving Natchez. No-

thing could exceed our joy upon this occasion : we jumped, halloed, and appeared as elated as if we had succeeded to the greatest estate imaginable. It was not long ere we approached the door of this auspicious mansion ; but we met with a repulse, which at first diminished somewhat the pleasure with which we were before transported.

An old woman came to the door, and told us that the settlement was but just formed ; and that therefore she could afford us no shelter nor provisions ; but that there was another well-established plantation about a mile and a half farther on, where we might meet with refreshment, &c. This latter sentence revived us again, and we once more pursued our journey to the desired spot. We soon approached it, and entering the yard saw the horses of our companions ranging about in a field near the house. This was an agreeable sight to us, as it was one trouble off our minds : and it was not long ere they themselves came out to meet us, and congratulate us on our entry into civilized life. We were not far behind them, for they had arrived there only this morning, and had immediately ordered something to be got ready for a meal.

This plantation belongs to a Mr. Joslin : it is situated about six or seven miles from Nashville, and is one of the last settlements on the path towards the wilderness. It has been formed about seven or eight years, and consisted of several acres of land tolerably well cultivated : some in corn, some in meadow, and others in grain, &c. His house was formed of logs, built so as to command a view of the whole plantation, and consisted of only two rooms ; one of which served for all the purposes of life, and the other to hold lumber, &c. Our fare, when it

came to be served up, was such as we might have expected in such a rough country as this : it consisted of nothing more than a large piece of boiled bacon, and a great dish full of French beans, together with some bread made of Indian meal. However, as it was *quantity*, not *quality*, which we stood most in need of, we made a very hearty meal, and devoured with great avidity the homely fare that was set before us. This being over, we intended to have performed our promise to our companions who were left behind, and to have sent out a person with provisions to meet them. But ere we had quite finished our repast, and whilst we were talking upon the subject, they both made their appearance withinside the gates of the plantation ; and they soon rejoined us and partook of our fare.

Being now all assembled together in perfect safety after so many difficulties and dangers, we began to communicate to each other the particulars of each day's transactions from the time we parted, and to compare our observations with each other, in order that we might judge of the course which each had taken, &c. &c. In this manner the few hours of the afternoon passed away very agreeably, and it was now sunset ere we thought of starting ; in fact, there was only Bledsow and myself (who wished to get on) that had it in view to continue the journey that night ; as to the rest, they had determined to stop here a few days to rest themselves and their horses ; but, for my own part, I conceived that I should find better accommodations at Nashville, and accordingly started for that place this evening in company with Bledsow. Our road lay through a beautifully rich country, formed of a fine black mould, lying on a bed of limestone. The plantations seemed to

be frequent as we passed along, but more so towards Nashville. We even met, within three or four miles of the town, two *coaches*, fitted up in all the style of Philadelphia or New York, besides other carriages, which plainly indicated that a spirit of refinement and luxury had made its way into this settlement. As we approached the town, the plantations on either side the road began to assume a more civilized appearance, yet still not such as one observes in the neighbourhood of large towns or cities. It was near seven o'clock when we reached Nashville. The sight of it gave us great pleasure, as, after so long an absence from any compact society of this kind, we viewed the several buildings with a degree of satisfaction and additional beauty which none can conceive but those who have undergone the same circumstances. We inquired for the best tavern in the place; and having ascertained where it lay, we hastened to it, and giving our horses to the ostler, entered the house and sat us down, completely happy in having performed this laborious and troublesome journey.

We had still, however, *another* wilderness to go through ere we arrived at the settled parts of the United States; but as this town was a kind of resting place for us, we did not look forward to any farther difficulties and dangers, but considered our journey as at an end. In fact, the principal part of it was, for now I had not much more than a thousand miles farther to go; but this I had to travel by *myself*, as my companion left me at this place, in order to proceed to Kentucky, whereas *my* route lay through Knoxville, on the Holstein river. Next day,—

Tuesday, August 1st,—I went round to view the town, found it pleasantly situated on the south-west bank of

Cumberland river, and elevated above its bed about eighty or one hundred feet. The river here is about 200 yards wide. The country all round consists of a layer of fine black mould on a bed of limestone, which in many places projects through the surface, and shows itself in dark grey protuberances. In the year 1780, a small colony, under the direction of James Robertson, crossed the mountains and settled this place; but it was not till within these few years that it could be called a place of any importance.* This town is situated in the new state called the state of Tennessee, which has been lately formed in this country. You are aware that at the close of the American war, all the states (except Georgia) gave to the *United States* all their lands lying to the westward of the Allegany mountains. These lands were then very little inhabited, and were intended to be reserved as a fund for the payment of the debt incurred by the war. North Carolina ceded her tract in the year 1789; and on the establishment of peace, so rapid was the emigration to this country, that the legislature of this territory at their session in July, 1795, made a law for numbering the inhabitants, in order to determine whether they were not entitled to all the privileges of a *state*, according to an act of Congress passed the 13th July, 1787, respecting states to be formed in the ceded territory; which provides that, "Whenever any of the said states shall have 60,000 inhabitants therein, such state shall be admitted by its delegates into the Congress of the United States, on an equal footing with the original states in all respects whatever." On taking the census, it appeared that there were in the

* In the year 1791, there were 7,000 people on Cumberland river.

territory 77,262 inhabitants, of whom 66,549 were free persons; whereupon the governor, in pursuance of the law, called a *convention*, who lately met at Knoxville, formed * a constitution, &c. This constitution breathes the true spirit of republicanism, and is formed much after the same manner as some of the others, with all the improvements which time and experience have pointed out in the science of legislation.

You will observe that this state may be divided into two parts, the eastern and western, which are separated from each other by a wilderness which is possessed by the Indians; for though the inhabitants claim the whole of the territory bounded by the two parallel lines of the 35th and 36½th degree of north latitude, and between the Allegany mountains and the Mississippi river; yet they do not possess more than a quarter of that tract in *full right and sovereignty*, for the Indian title is not yet extinct to the major part of it. You will see by the map what part belongs to each. The Indians dispute every inch of ground with the Americans, and will not let them encroach upon their territory. What claim they have to the land which they *do* possess, has been obtained *by purchase*; and so particular are the Indians in abiding to their treaties and in asserting their own rights, that a party of them generally watch the surveyors appointed to run the line between them, in order to see that they do not go wrong. But oftentimes the line is not run till several years after the treaty, and both parties abide by the *verbal* description and their local knowledge of the place, which often creates disputes when the line

* All this sounds *terrible* in England, but it is a matter of course in America.

comes to be actually run, as *then* it is often found that one party or the other has encroached. This was the case when I travelled through this country, as will be explained in its proper place: at present I shall go on with my description of Nashville.

This town contains about sixty or eighty families; the houses (which are chiefly of logs and frame) stand scattered over the whole site of the town, so that it appears larger than it actually is. The inhabitants (like all those in the new settled towns) are chiefly concerned in some way of business: a *storekeeper* is the general denomination for such persons, and under this head you may include every one who buys and sells. There are two or three taverns in this place, but the principal one is kept by Major Lewis. There we met with good fare, but very poor accommodations for lodgings; three or four beds of the roughest construction in one room, which was open at all hours of the night for the reception of any rude rabble that had a mind to put up at the house; and if the other beds happened to be occupied, you might be surprised when you awoke in the morning to find a *bed-fellow* by your side whom you had never seen before, and perhaps might never see again. All complaint is unnecessary, for you are immediately silenced by that all-powerful argument,—*the custom of the country*, and an inability to remedy it; or perhaps your landlord may tell you that if you do not like it you are at liberty to depart as soon as you please. Having long been taught to put up with inconveniences, I determined for the future to take things as I found them, and if I could not remedy them, to be content. Besides, I did not feel the ill effects of this rough accommodation so much as another person

might in travelling from a more civilized part of the world, because every thing which was beyond a piece of bread and bacon, and the cold hard ground, appeared to *me* as a luxury.

I know no other particulars of this place, except that it is the *principal* town in this western division of the state, and that the country about is pretty well settled, considering the time since its first establishment: what other particulars you may wish to know of this new state, you may learn in Morse or Imlay. There are several other little towns in the neighbourhood; in fact, the banks of the Cumberland river, on both sides, are well cultivated for a considerable distance. Major Nelson, who boarded with me at Major Lewis's, is forwarding a settlement, and laying off a town at the head of Harper's Creek, about twenty-five miles off, where he sells his half-acre town lots for ten dollars, and his *out lots of ten acres* for thirty dollars, on the condition that improvements are to be made, and a house built within two years. The price of land about the vicinity of this place, *unimproved*, is from one to four and five dollars, according to its situation and neighbourhood.

I did intend to have waited at Nashville some time, in order to rest my horses; but not being able to find any person in the neighbourhood who had a good pasture, and being rather tired of my lodgings, I determined to proceed. My course now was towards Knoxville, a town lying on the Holstein river. Between Nashville and that place, I have already told you, there is a *wilderness* about three hundred miles long, which I had to cross. This wilderness properly commences about sixty-two miles from Nashville, though the *whole of that distance* is

scarcely better than a wilderness after you proceed about half-a-dozen miles from the town ; for the houses are so far apart from each other, that you seldom see more than two or three in a day. I was determined also in starting so soon, by the idea that I should meet with a plantation on the road, where I should find a pasture, and where I should accordingly stop and refresh my horses ; for there is no part of these new settlements but you may take this liberty, if you pay them well for it ; the idea of their being hospitable and doing a kindness to strangers for *nothing*, is false. This hospitality is only shown to neighbours, &c., where they expect it will be repaid by the same return, and arises from a want of inns on the road, where travellers may call and do as they please. Having come to this resolution, I left Nashville on

Wednesday, August 2nd, about four o'clock in the afternoon, having stayed there about two days. I had now a prospect of travelling upwards of a thousand miles by myself, one-third of which was through a complete wilderness among the Indians, and one-half of the remaining part not much better. However, as there was no one going the same way, I resolved to start by myself and take the chance of the road, whether any one should overtake me or not. Bledsow had left me the day before, on his way to Kentucky. Accordingly I mounted my riding-horse, and leading the other (which carried my baggage) by a rope, I directed my steps towards the water-side, and being put across by the ferryman to the opposite shore, (for which I gave him one-sixteenth of a dollar,) I kept the main path through the woods, as I was directed, and made the best of my way to a Mr. Blackamoor's,

distant about nine miles where I intended to sleep that night. The gloomy and majestic scenery of the surrounding objects, you would be apt to imagine would excite a degree of melancholy in a person not used to such scenes; but this was not the case with me. By a frequent familiarity with such objects I had become callous to their *ill* effects, and indulged only those ideas which afforded the highest pleasure, and the most grateful contemplation. Surrounded on each side with a deep *aval* of woods, I enjoyed the serenity of the evening in silent meditation: everything which I saw and heard taught me a lesson which required not the powers of oratory to embellish it. So soon as the sun had taken his station below the horizon, the moon began to spread her silver light, and to shine in silent majesty through the openings of the trees: and it was by her kind assistance that I reached my destined port; for, by my ignorance of the way, I had mistaken the path, and (wandering about the woods without a guide) did not reach my place of destination till between eight and nine o'clock. I approached the house, and found that I could be accommodated with lodging there; accordingly I unpacked my horses, and taking the baggage within doors, I led them to the field, and gave them some corn. I then began to inquire for something for my own supper; but was informed that I could have nothing but some Indian bread and butter, and some milk, which is a standing dish in all these new countries. Accordingly I sat down to this rough fare, and having made a hearty meal, went and sat in the open air to enjoy the serenity of the evening; and when the time came for retiring to rest, I took my blankets *out* and spread them on the *hard ground*, though there was

a very good bed prepared for me within doors. But habit has such an influence over the human mind, that this mode of sleeping (which at one time appeared very rough and unpleasant) was now the preferable of the two ; and I adopted it as the most agreeable. In the morning,—

Thursday, August 3rd,—when I came to discharge my reckoning, I found they had the impudence to charge me a *dollar* for this rough accommodation ; that is, for a little bread and butter, and some corn my horses had eaten. I could not but be angry at this imposition ; but as there was no remedy, and as I disliked any altercation, I gave them the money and departed. As I expected to meet with settlements in different places on my way, I had not laid in any provisions, but depended merely upon what I could get at these settlements : however, I soon found that I reckoned without my host ; for I proceeded the whole of this morning without being able to obtain a morsel of anything to eat. I called at almost every plantation I saw, but they were so poor, or so distressed for provisions themselves, that I could get nothing. About the middle of the day I saw a mill at a short distance. Here, I thought, there was no fear of getting something. Accordingly I hurried on to the place ; but how great was my surprise to find these people in the same unfortunate situation, and that the mill (owing to the dryness of the season) had not been in motion some months ! To make the case still worse, I understood there was but one more settlement for a considerable distance. I accordingly hastened to this place ; but they pleaded the same excuse. However, after a great deal of entreaty, I got them to give me a piece of bread which they had left at their morning's meal ; therefore, hastening with this down to a brook

which ran by the side of the house, I sat me down upon a log and made a comfortable breakfast. Alas! cried I, if mankind did but know how little would satisfy them, they would not pursue so eagerly the bubble riches; which as often brings discontent and unhappiness, as it does the means of satisfying their inordinate passions. If we take a view round the world, how often do we see that fortune scatters her favours on the most worthless objects, and that happiness (the end and aim of every one) by no means keeps pace with an increase of wealth! And I, with my crust steeped in the pure spring of nature, am as happy and as contented as the proudest monarch that sits upon a throne. You will excuse this digression; but as you wished for a *faithful* detail of my journey, you must be content to receive all the remarkable impressions which were made upon my mind,—to receive not only the *outward and visible*, but also the *inward and spiritual*.

Having suffered my horses to graze about a little, and to eat some corn which I had purchased at the house, I resumed my course once more, and at about eight o'clock got to Mr. Kerby's (distant from Blackamoor's eighteen miles). Here I found a great difficulty to gain admittance. There was no one at home but the woman of the house and some of the servants. She said her husband was gone out, and she did not know whether he would return that night or not; and that he would be very angry if she suffered any one to sleep there when he was absent. From the current of the poor woman's discourse I perceived her husband was jealous of her; and as there was no other plantation near this place, I wished, both for her sake and my own, that he would arrive. Whilst I was putting up

this pious ejaculation, who should appear at the gates but the very man himself ; and as this removed all the charms of bolts and bars, I unpacked my horse, and led him away to the pasture. As to myself, I returned and made much such another meal as I did last night ; and that done, I took my blankets *out of doors*, and lay down in the open air till morning,—

Friday, August 4th,—when I started pretty early, and got to Major Blackamoor's (three miles) to breakfast. Here I found a good pasture for my horses, and tolerably good accommodations for myself ; and the people of the house appearing very civil, I resolved upon stopping here a week or ten days in order to relieve my horses.

The Major was one of those early emigrants who had come here at the *first* settling of the country ; he had got a good deal of land about him, a great part of which was in a rude state of cultivation. His house remained the same as when it was first built—and of course cut no very striking figure ; but as it was like all the rest in this country, its uncouth appearance and rough accommodations escape particular attention. Its situation was about two or three miles to the northward of the Cumberland river, and the soil consisted of a rich earth lying on a bed of limestone, which pervades the whole of this country. Mr. Blackamoor is a major in the militia, and possesses several negroes under him, who work upon the plantation : in fact, the whole drudgery (both of house and field) is committed to the slaves, under the superintendence of the master. I have already observed to you that there are few or no taverns in these newly settled countries ; but that almost all the farmers who live near the road will take in strangers and travellers, giving them

what is called "dry entertainment," that is, board and lodging, but without any spirituous liquors. For this entertainment they generally take care to charge enough, as I have also remarked elsewhere.

Major Blackamoor was one of these gentlemen, though I must confess that his charges were more moderate than many* I had witnessed. I stopped here about a week, when on

Thursday, August 10th, a Mr. Davidson, of Kentucky, happened to stop to dine here; and informed me that he was on his way to Knoxville, and wished for some one to accompany him. As this was the route I was pursuing, I embraced the opportunity, and told him we had better proceed together, to which he consented; and having mentioned it to our host, he promised to get us some provisions ready for our journey; for we were now arrived at a point on the road where we could not expect to derive much assistance in this way from the inhabitants, as they were all new settlers, and had scarcely sufficient to keep themselves. Accordingly, the next morning,—


Friday, August 11th,—having put a sufficient quantity of beef, bacon, flour, &c., (the common provisions upon

* None of the houses in this part of the world are built higher than the ground floor; and the flooring (if any) is made of very rough boards laid on the ground, sometimes on joists, and sometimes not; but always with great holes between the planks. When I was at this man's house one of the slaves saw an enormous snake gliding under my bed, and passing through one of these holes in the floor. The Major, to my comfort, told me that they sometimes got into the bed, but that they would not hurt me. So soon does custom get the better of these things, that he did not seem to care much about it.

such occasions,) we started together rather early. We had not proceeded many miles ere we stopped at a house where Davidson met with some of his relations, who prevailed upon him to stop with them a few days, and said that then they would accompany him. He consented, and told me that he could not proceed on with me unless I would wait for him ; but I (not wishing to delay any longer) took my leave of him, and continued on my way by myself, determined to cross the wilderness alone, if I should not meet with any one to accompany me. I travelled on till about half-past five, when I came to a small creek which I was told (when I set out) was eight miles from the ferry. As I had now passed all the settlements except the one at the ferry, (which I could not reach that night,) I determined to halt here, as there was a nice clear stream, and plenty of cane and grass for my horses. I accordingly crossed the creek, and alighted at a spot which I observed had been used for the same purposes before. The first thing I did was to collect plenty of wood together and to kindle a fire : this I soon accomplished. I then went to the stream, and filling my tin cup with water, hung it over the fire and made me some coffee, at the same time opening my wallet, and laying out all my provisions. I then sat me down upon the ground, and made a hearty and a comfortable meal ; and after roving about to enjoy the wildness of the place, returned to my fire, and, spreading my blanket, lay me down to rest. This was the first night I had ever slept out in the woods *alone*, I therefore could not but remark my own feelings upon the occasion. I expected that it would have appeared more dismal and melancholy than it really did ; but, whether I had become callous to all those ideal

apprehensions which we are too often disposed to anticipate without any cause, or whether I was in that temper of mind not to regard the gloominess and loneliness of the place in which I was, I cannot pretend to say ; but certain it is, that I laid down with all the composure imaginable, and slept very soundly, without ever once waking, till the morning.

Saturday, August 12th.—Started by daylight on my journey, and proceeded on to the ferry. When I came within two miles of the place I was brought to the brow of the high lands on which I had been travelling all this time. From this spot I had a most delightful view of the surrounding country, and of the distant hills which border upon the Cumberland, presenting a wild, mountainous appearance, which could not fail to interest the spectator. Having descended into the bottom, I passed one or two habitations, and at last came to the ferry-house, where I stopped, and giving my horses some corn, took breakfast with my host, who furnished me with coffee and some fried rashers of bacon, served up with Indian bread : a common breakfast in this part of the country, where nothing better is to be had. This man's house stands immediately upon the banks of the river ; and to the advantage of cultivating his own plantation, he unites the profits of the ferry. The river is here one hundred and seventy yards wide ; and a little distance below the house a stream called "The Caney Fork" comes in. This is a considerable branch of the Cumberland river, and is so called from the quantity of cane brakes on its banks. This spot is sixty-two miles from Nashville by land, though by water it is one hundred and thirty. I was ferried across here about ten o'clock. I paid one-eighth of a



dollar for each horse, though at Nashville I only paid one-sixteenth. It is customary not to charge anything for the passenger, only for his horses. I was landed on the opposite shore, exactly on the point of land where the two rivers met. The prospect from the middle of the stream was delightful: you appeared in the centre of three grand rivers, whose banks were everywhere formed of lofty eminences, towering over each other with a kind of majestic pride, and covered with verdure to their very summits.

On leaving this mansion, I took my farewell of all kind of society till I arrived at the opposite side of the wilderness. I ascended the banks with my two horses, and, striking into the woods, directed my steps the nearest way to my desired port. I had now no prospect before me but of traversing the howling desert by myself, and of wandering alone and unprotected through this dreary wilderness. Owing to the frequent communication which is commonly kept up between the eastern and western parts of this state, I found no great difficulties in ascertaining the right path, though sometimes I have been in very disagreeable dilemmas on this head. Not far from the ferry, I met with a party of travellers going to Nashville. We stopped and had some little conversation together, and then separated, and each pursued his destined route. They wondered very much to see me by myself in the woods, and recommended me to wait for company.

Towards the afternoon I ascended one of those high hills with which these rivers are surrounded. I had understood it was a very long and a very difficult one; and that I should find but one spring of water throughout

the whole distance of it, which if I passed, I should not meet with any more till I descended a considerable way into the valley. The day was very hot, and both my horses and myself consequently very dry. I watched very narrowly for the spring, which issued from the side of the mountain, and actually descended several paths which appeared to lead me down to it; but, fruitless in my search, I determined to pursue my journey, and not to stop till I reached the brook in the valley.

Night came on, and I had not yet reached the brow of this mountain; but in about an hour after dark I found myself on the descent, and soon after reached the valley below. Overcome with the fatigue of this troublesome journey, I would willingly have laid me down to rest at the foot of the mountain, and suffered my horses to have refreshed themselves with the pasture they should find there: but the pains of extreme thirst, which had not been allayed since the morning, were too powerful to be neglected; I was therefore obliged to proceed. The afternoon had been beautifully fine, and gave reason for indulging the hope of an equally propitious day on the morrow; but, alas! scarce had the sun set below the horizon, ere I perceived the clouds begin to assemble together, and to indicate an approaching storm; to heighten the scene, also, I heard the rumbling noise of distant thunder, and soon after perceived the faint flashes of the fiery lightning. I thought the elements were very unkind to me, the first night of my embarking in the wilderness alone; yet, as I had long before this learnt to bear the sports of fortune, I resolved also not to suffer this little deviation from the smooth track to ruffle my temper. I therefore pursued my course without an unpleasant or discordant thought.

I continued on till I found the thunder and lightning increase upon me. It was now near ten o'clock, and dark as pitch, save when the vivid flashes kindly lent me a ray of light to help me on my way. I had observed no signs of water; and, fearful that I should not be able to kindle a fire if I continued on till the rain descended, I determined (parched as I was with thirst) to stop and take up my abode for the night.

I got together all the wood I could discover near me, and, kindling a fire large enough to roast an ox, and which I thought might be able to withstand any rain which might fall, spread my blanket, and lay down to rest. I had scarce accomplished all this ere the storm approached upon me; the lightning began to be more frequent, and the rain to descend, and in such torrents did it come down, that this vast flame which I had so lately kindled was soon extinguished. The rain refreshed me very much; and, regardless of all the bustle about me, and the state of darkness in which I was now left, I fell fast asleep, wrapped up in my blanket, and having my head reclining upon a log of wood for a pillow. In this situation, overcome with fatigue, and "indifferent in my choice to live or die," I weathered out this storm, and slept very soundly till three or four o'clock in the morning, when I awoke and found the elements had not ceased their contest, but were still warring against each other in all the impetuosity and rage of two discordant enemies. As to myself, I observed that I was nearly covered with water: for I had chosen a *hollow* place, which served as a *bed* both for me and the water, and had I continued there much longer it would have approached my head. You will naturally conceive that this drove away all sensations of thirst: it did so, and I awoke very much relieved from

that inconvenience; and, rising from my bed and wringing my blankets, went and lay down on a higher spot of ground, and slept very soundly till morning,—

Sunday, August 13th,—when I awoke and found every cloud dispersed, and the sun rising beautifully in the east. This agreeable contrast with the preceding night induced me to say, with Othello,—

“If after every storm there comes such calm,” &c.,

and I “proceeded on my course rejoicing.” I had not gone far before I came to the little rivulet which I had been seeking so long; but now, as all thirst was departed, I passed it without scarcely deigning to look at it.

About nine or ten o'clock I ascended the Cumberland mountains. Those mountains are a spur from the Allegany, and separate from them about the middle of Virginia, proceeding in a south-western direction, and giving rise to several famous rivers, all of which flow into the Ohio, and water the new states of Tennessee and Kentucky. They are not quite so high as the Allegany mountains; and at the place where I passed over them, they are about fifty miles across, and in some places are perfectly level at top, watered with fine streams, and affording many excellent situations for plantations, agreeably to what I have already said of the Allegany mountains. There is one place in particular, called the Crab Orchard, which is ten miles from the east foot of the mountains, and at the west foot of the Spenser's Hill, which I will describe when I arrive at it.

My first approach to these mountains was along a plain almost void of trees, and covered entirely with grass; and at the termination I saw the base of the mountains ranged in majestic order before me, bidding defiance to

my approach, and indicating the difficulties I should have to encounter in the accomplishment. I was obliged to dismount from my horse to ascend these steep eminences. I observed the soil to be composed of a red earth, which made the hill appear as if there had been a quantity of bricks broken and scattered about. The rain had made it very slippery, which rendered it very unpleasant. It was near an hour before I got to the top of this first hill, which was but a prelude to what I had to encounter; for I observed at some distance the tops of other eminences whose sides I had to mount, and (these ascended) still more at a greater distance, which reminded me of Pope's line in his *Essay on Criticism*,—

“Hills peep o'er hills, and Alps on Alps arise.”

The sun had shone very bright ever since he had risen, and dried up what little moisture the rain had kindly distributed last night. It was now between eleven and twelve o'clock, and time for me to rest both myself and my horses; but as I could observe no water any where, I was obliged to proceed. I continued on for some little distance, and at last observed a hollow in the ground where some rain water had lodged on the day preceding. Here I alighted, and kindling a fire, made some coffee, and fared sumptuously on some bread and butter and mutton, which I had brought with me from Mr. Blackmoor's. Here, being all alone, I sauntered about the woods to observe the fine romantic views which my peculiarly elevated situation afforded me. I then returned to my encampment, and reclined under the shade of some lofty tree for an hour or two, and after giving my horses time to graze about the woods, pursued my journey.

I continued on my way this afternoon without meeting

with anything very remarkable. The agreeable diversity of hill and dale with which this state is favoured, together with the delightful views of a fine romantic country, served to dissipate that ennui and wearisomeness which, perhaps, I might otherwise have experienced. There had been an army across this place about two or three years ago, and I took a pleasure in observing their track through the woods, and in tracing out their different encampments as they went along. In some places I could hardly discover any remains of their march; in others, it was distinctly visible. I determined upon halting early this evening, not only that I might thereby rest my horses from the fatigue of ascending such steep eminences, but also that I might be enabled to kindle a fire and take my repast before the night set in. Just before six I came to a brook, which I followed some little way into the woods, in order that I might get off the path and avoid discovery, and (having singled out a convenient spot surrounded by a thicket on every side) I unpacked my horses, and determined to tarry here all night. Thus you behold me a third time encamped out in the woods by myself. I was by this time got pretty well used to it, so that I lay down with as little concern as if I had been surrounded by a numerous party. My sleep was undisturbed till the morning,—

Monday, August 14th,—when I awoke, and pursued my journey alone. As I was proceeding on my way on foot up one of the steep eminences among these mountains, whom should I discover (on turning round) at some distance behind me, but Mr. Davidson, whom I had left a few days ago in the settlements. I immediately stopped my horses and halted till he came up. It was a joyful

meeting to us both, as we were each travelling alone. He informed me that his friends having declined accompanying him, he had made the best of his way to overtake me, that he had passed two nights alone in the desert, and had tracked me to the very spot in which we were then speaking. We compared notes respecting our situation on the stormy night of the Saturday, and found that we could not have been a great way from each other. Under such circumstances it would have been fortunate to have found a companion.

Our conversation now beguiled the path amazingly, and we reached the summit of the mountain without having experienced any toil or fatigue. Our course lay now over a smooth plain, and the agreeableness of the place would have induced us to halt, had we found any water near; but there being a scarcity of that article, we were obliged to pursue our journey still farther. At length, finding that our search was fruitless, we sat us down and finished our repast without any liquid whatever to appease the pressing calls of thirst, which the heat of the climate and the labour of the journey induced. As I was wandering about, according to my custom, to observe the beauties of the country, I saw in some few places the tracks of deer or other animals on the ground, which were filled with water, the last remains of the storm on the twelfth. These tracks hardly contained a wine-glass full apiece, and were so shallow that we could not take up the water with a spoon which we had with us without mixing it with the dirt at the bottom; we therefore cut a flat stick, and hollowing it out somewhat in the middle, took it up *drop by drop*, and placed it in a tin cup till we had nearly filled it, and having collected sufficient for a

draught, drank it up, and thus appeased the pressing calls of nature. We then pursued our journey, and were continually delighted with the romantic scenery of the country, a fine view of which we gained when we reached the summit of the various eminences with which this part of the country abounds. About four o'clock we arrived at Oba's river : it was a pretty wide stream, but very shallow, and full of large stones, or rather rocks, which, together with its craggy sides, contrasted with the surrounding woods, formed a picturesque and pleasant appearance. I should have been surprised to find so large a stream at the top of the mountains ; but as I observed the same thing on the Allegany mountains, and justly concluded that this was the source of all the large navigable streams that water this country, my surprise was somewhat abated. We did not proceed far beyond this place ere we encamped ; and we had scarcely kindled our fire, before we were joined by a party of three other persons who were travelling the same way as we were, and who, observing our fire, had made towards the place where we encamped, with an intent of passing the night with us. We were happy to see them, as it not only strengthened our party, but also enlivened a few hours which otherwise we might have passed very dull for want of company. We set our new visitors to collect wood for the fire ; and there being an appearance of rain, we formed a curious kind of Indian tent out of the bark of some trees which we saw scattered about. This appeared to be an old encamping place, as there were the remains of several fires and camps on every side of the little stream of water on whose banks we halted. Our fears were however, groundless ; for the night passed away very pleasantly, and the next morning,—

Tuesday, August 15th,—we continued our journey. We had not met a single person in the wilderness all this time, since I took leave of the few travellers I met with on the banks of the Cumberland river. However, this morning we met with a party of emigrants who were travelling to the western division of this state, and who had got a waggon along with them, together with a few cows and other cattle. They appeared heartily fatigued with the labours of the journey, and inquired of us how far it was to the termination of the wilderness. We gave them but a bad account of the roughness of the roads, of which they said they had encountered enough already. In return we asked them concerning the state of the paths which we were pursuing, of which they also could give no flattering account: in particular, they told us that we were approaching towards a part where we should find great scarcity of grass in the woods; and consequently that we ought to take advantage of those spots where we should observe any. Having delayed some little time in conversation, we proceeded on, and soon after halted to take our morning's repast. We did not continue here so long as we had used to do, as we wished to reach the Crab Orchard in the evening. We accordingly hurried on; and having passed two small rivers, or rather creeks, we arrived at that spot about five o'clock.

Here we halted some time, in order to admire the beauties of the place. It is a fine large plain, or natural meadow, containing many hundred acres, and covered throughout its whole extent with a tall, rich grass, surrounded on every side by the neighbouring mountains, and watered with several fine springs, which flow from one end to the other. The scenery of the craggy mountains, covered with trees to their very top, contrasted

with the smooth level of the plain, afforded us a view highly picturesque, novel, and enchanting ; and one which we could not but dwell on with pleasure. Near one end of it, and not far from the road, is a very great natural curiosity. It is a subterraneous cavity in a rock under the mountains, down which you descend, by some steps cut in the stone, into a large spacious room, through which runs a clear, limpid stream of spring water, which rises from the rock at one end, and flows out at the other, through a passage under ground, and disgorge itself in the open air, not far from the entrance to the cave. I thought within myself, that this would form an admirable situation for a settlement, and this subterraneous cavity would afford an excellent convenience for a *spring house*,* being always cool, even in the hottest seasons.

With regret we left this delightful spot, and proceeded on about one mile and a half further, to the foot of Spenser's hill, where there was an excellent spring of water, and plenty of grass and pea-vine for our horses. Just before we reached this spot we met a party of horse-men, who were bound also to the western divisions of this state. The number of persons whom we now met surprised me very much, never having before noticed any thing of the kind in a desert wilderness ; but it must be observed that, since the Indians have been at peace, travelling has been more secure, and small parties have not feared to trust themselves along the wilderness ; and as emigration is increasing very fast, there is great probability that this road will, in the course of a few years, be as secure as any in the United States.

* A spring house is a very common appendage to an American farmer's establishment, even in these rough countries. It is a substitute for an ice house.

We endeavoured to persuade this party to join us this evening; but as they were in a hurry to proceed they soon left us, and we presently after reached the place of our destination.

As we had experienced great want of water in our journey across these mountains, any thing which partook of the nature of a stream would have been acceptable to us: how much more then must it be to meet with one of the *finest springs* the earth ever produced! We drank of it as if it were nectar, and had it possessed any spirit, we should have lain down overcome with its fumes. We kindled a fire for the night, and then led our horses away to a neighbouring spot abounding with rich grass and peavine. We then returned to our encampment, and passed away the remaining part of the day in observing the beauties of the place. We were now at the termination of the smooth plain I have been mentioning, and (after having made some circuitous turnings) were arrived at a foot of one of the highest ridges of these mountains, the ascent up which is remarkably steep and difficult. As I was wandering about, admiring the beauties of the place, and embosomed in woods and mountains, I could not but reflect what an insignificant creature I appeared among these magnificent works of the Divine Creator; and it threw me into a train of thought somewhat similar to what I should conceive Addison was in, when he penned certain numbers of the Spectator. We strolled about here till it was quite dark, and returning to the rest of our company, (by the light of the fire they had kindled,) spread our blankets and lay us down to rest; and the next morning,—

Wednesday, August 16th,—awoke pretty early, in order

to surmount, before the heat of the day, the difficult path which lay before us. This was no less than one of the steepest and longest mountains I remember to have passed over. It was with difficulty our packhorses could ascend it, and we were obliged to halt several times, or they would not have been able to proceed. Having reached the summit, we proceeded on pretty well afterwards, as the descent was by no means so rapid; and when we reached the foot of the mountain on the other side, we halted at the first stream of water to refresh ourselves and our horses. Coming down from these mountains, we had a most delightful view of the surrounding country. The spurs or ridges of mountains which projected from the side of this vast base formed an agreeable variety of hill and dale immediately under us; and the distant plain, or sea of woods beyond, formed a delightful and enchanting contrast.

We did not stop long at our breakfast, but (wishing to proceed on our journey) saddled our horses, and made the best of our way to Clinch river, where we arrived about three o'clock. Here we took leave of the wilderness, and observed once more the marks of civilized life. On the banks of the Clinch river we remarked a small Indian encampment, where a few Indian women were dressing some victuals: they told us their husbands were gone out to hunt. Whilst our horses were ferrying across in the boat (which belongs to a man who has a plantation on the opposite shore) we entered into conversation with them, and exchanged some salt and gunpowder for some mockasons which they had got.

Clinch river, where we crossed it, was two hundred and eighty yards wide, and was within sight of its junction

with the Tennessee, of which it is one of the principal branches. It is thirty miles below the junction of the Holstein and Tennessee rivers. We paid for our ferriage one-eighth of a dollar for each horse. It will be observed, by an inspection of the map, that from the time we took the Cumberland mountains to this place we have been travelling *within* the Indian country. The Indians keep this tract of land in full sovereignty, and have not yet parted with their title to it to the United States. But soon after we leave the banks of the Clinch river, we get once more within the proper limits of the state of Tennessee. After refreshing ourselves at the ferry we continued our journey, intending to reach this evening an encampment of men, women, and children, which was formed between this place and Knoxville. These people were waiting to set out to settle some lands on the Tennessee river, but (as there had lately been a dispute with the Indians with respect to the *running the line* which divided their territory from the United States) they thought it best to wait the issue of the negotiation which was pending. The limits of the Indian territory had been fixed by the treaty of Holstein; but it being some years after ere the line was actually run, they found (when they came to survey that part of the country) that a number of inhabitants had encroached and settled on the Indian territory. This was not at all to be wondered at, as it is almost impossible to know exactly *where* a line (drawn only upon paper) will actually strike when it comes to be measured. As the United States (agreeably to the policy which they have universally adopted) were determined that the Indians should have no just cause of complaint, they ordered all the families which had so en-

croached to remove within the limits of the United States, and the President actually sent a detachment of the army into the country to enforce his commands. This was the bone of contention, which was the subject of conversation in every place I went into. The inhabitants firmly opposed being removed from their settlements; and they were supported in their opposition by the encouragement of those who were within the limits of the United States, as they all hate the Indians, and think a little deviation from justice is a thing to be overlooked where their two interests clash with each other. So far does prejudice carry us! And I believe the inhabitants were prepared to defend themselves against the soldiery with the point of the sword. Happily, things did not come to these extremities, for it was discovered that the line which had been drawn by the surveyors was not agreeable to the treaty; that if it had been drawn *right*, it would not have cut off any of the inhabitants of the state within the Indian limits. Accordingly, a representation of this case was made to the General Assembly at Knoxville, who forwarded a remonstrance to the President of the United States; and at the same time formed a number of resolutions indicative of their determination not to suffer the inhabitants to be turned out of their possessions. Such was the state of the country when I was in it. We reached the encampment about sunset, and having kindled a fire amongst them, and turned our horses into the woods to search for pasture, went round to visit the different parties we saw there. They were scattered over a rising ground, near which were some fine springs of water. They seemed to lament their situation, in being deprived of going to settle the land

which they had justly and fairly bought; and were so worked up by the apparent hardness of their case, that had things taken a contrary turn, I believe they would have forced their way by the point of the bayonet. We strolled about amongst them till it was quite dark. The sight of any kind of society quite enlivened us, and we returned to our *grassy bed* in health and spirits. In the morning,—

Thursday, August 17th,—we rose again to pursue our journey. It was some time before we could find our horses, as they had strayed farther into the woods than we had ever known them to do before. By the assistance of some of our kind companions, we soon recovered them, and (taking leave of this little society) directed our steps towards Knoxville, the capital of the state. Soon after we started, I took leave of my companions, as they were going another road from the one I was pursuing; I therefore *jogged* on by myself, admiring in silence the different agreeable objects which were continually presenting themselves to my eyes. About one o'clock I stopped at a plantation which I saw on the road, and having alighted from my horse and given him some corn, walked into the house to get something for myself: for at all these places you may take this liberty if you pay them well for it. I found the family just set down to some soup, or kind of broth (which was made by boiling Indian corn and bacon together, or in some such way). It was to me very good, as I was extremely hungry, though at any other time or place I might have rejected it with disgust. Having tarried here about an hour, I pursued my journey, and within about a mile or two of Knoxville passed through the detachment of the army which had been sent down

here to enforce the President's command. The band was just playing a military air, and a number of people had come from the town to hear and to see. It was an agreeable sight to me, as I found myself emerged at once from the bosom of the wilderness to all the charms of civilized life. I stopped here a little, and recognised some of the officers whom I had seen before on the Ohio. Soon after I left them, and at six reached the town of Knoxville, which is forty miles from Clinch river. *Cætera desunt.*

[*Addendum.*—Mr. Baily concludes with the following memorandum :—"I could fill another volume nearly as large as this." By some loose papers preserved with the Journal, it appears that he left New York in an American ship, January 28, 1798. The ship was boarded by a French privateer, and himself and another, not having American passports, were made prisoners of war. Standing to it, however, that they were American citizens, they were permitted to proceed. They arrived at Bristol on the 1st of March.—Ed.]



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